THE NATIONAL CENTER ON
SCALING UP
EFFECTIVE SCHOOLS

Identifying the Characteristics of Effective High Schools

Report from Year One of the National Center on Scaling Up Effective Schools

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Executive Summary

The National Center on Scaling up Effective Schools (NCSU) is a five-year project working to develop, implement, and test new processes to scale up effective practices in high schools that districts will be able apply within the context of their own unique goals and circumstances. This report describes the activities and findings of the first year, specifically, from fieldwork conducted in four case study high schools in one of our partner districts, Broward County, Florida. The findings from this fieldwork inform a joint team of researchers, designers, and district educators toward promising practices around which an innovation will be built in the same district in years three, four and five of the Center's work.

The work of NCSU is informed by thirty years of research on the characteristics of effective schools. Although a consensus has recently begun to emerge around the "essential components" of successful schooling, far less is known about the ways in which educators develop, implement, integrate, and sustain these components. The Center's first year of fieldwork was designed to identify the programs, policies, and practices that effective schools in our study used to coordinate the essential components into successful outcomes for students. Four high schools in Broward County – two higher-performing and two lower-performing – were selected for case study on the basis of findings from a value-added analysis. Our comprehensive case study was conducted during the 2010-11 school year during three week-long visits to each high school.

We identified one major theme that cut across all ten components: personalization for academic and social learning.[2] In the area of personalization, our findings show that the higher value-added (VA) schools made deliberate efforts through systematic structures to promote strong relationships between adults and students as well as to personalize the learning experience of students. In addition, the higher VA schools maintained strong and reliable disciplinary systems that, in turn, engendered feelings of caring and, implicitly, trust among both students and teachers. Leaders at the higher VA schools talked explicitly about looking for student engagement in classroom walkthroughs as well as in their interactions with students. Teachers at the higher VA schools were more likely to discuss instructional activities that drew on students' experiences and interests. The higher VA schools also encouraged stronger linkages with parents. We will discuss this finding extensively in this report as it forms the basis for the innovation we will design and implement in partnership with Broward County in subsequent years.

The report is divided into ten sections. After an introduction, Section II presents eight essential components of effective high schools drawn from a comprehensive review of the high school reform literature (e.g., Dolejs, et al., 2006; Murphy, Elliott, Goldring, & Porter, 2006) and two others that emerged from the analysis of the fieldwork data in Year One. Section III details the research design, describing the sample selection, data, and three-stage approach used to analyze the data. In Section IV, we present case summaries of each of the four sites, referred to herein as B101, B102, B103, and B104 to protect confidentiality. In addition to summarizing the practices through which the essential components were manifest in each school, this section includes structural and demographic features that may be important for contextualizing the findings. In Section V, we compare higher and lower value-added schools in terms of the ten essential components and identify the bundles of practices that might explain observed differences.

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[2] As our major finding forms the basis for our innovation for scale up, we describe this finding in-depth. For additional information on the two other findings, please contact the authors.

Section VI points to practices that the findings suggest cut across various components to support school success, with particular attention to our major finding on personalization for academic and social learning. We also conclude with the next steps for the Center.

Section I: Introduction

The National Center on Scaling up Effective Schools (NCSU) is a partnership between The Broward County Public Schools, Fort Worth Independent School District, Vanderbilt University, Florida State University, the University of North Carolina at Chapel Hill, Georgia State University, the University of Wisconsin, and the Education Development Center (EDC). NCSU focuses on identifying the combination of essential components and the programs, practices, and policies that make some high schools in large urban districts particularly effective with low-income, minority students, and English Language Learners and developing processes to bring effective practices to schools that have struggled to improve outcomes for their students.

NCSU focuses on high schools for three main reasons. First, the overwhelming majority of research on effective schools and school reform is limited to elementary schools. Secondary schools are larger, organizationally more complex, and politically more complicated with multiple administrative layers and subject-based teachers and other specialists that often create natural divisions among staff (Cuban, 1984; Grossman, Wineburg, & Woolworth, 2001; McLaughlin & Talbert, 2001) and result in disagreements around goals, policies, and practices. Such factors make the process of change more difficult in secondary schools (Firestone & Herriott, 1982; Purkey & Smith, 1985). Second, national and international comparisons of student achievement indicate that, despite progress in elementary grades, underperformance in high school is a persistent problem (Rampey, Dion, & Donahue, 2009). There are extraordinary economic and educational consequences for students who are neither college nor workforce ready. Third, as prior research suggests, the relative importance of non-school factors, such as family background, decreases as students progress through school (Entwisle, Alexander, & Olson, 2000; Fryer & Levitt, 2002). Put simply, identifying effective high school practices holds the promise of increasing the outcomes and life opportunities of students.

The Center's work is divided into four stages: Identifying Practices of Highly Effective High Schools, Designing Innovations and the Transfer of Practices to Other Schools, Evaluating the Intervention's Implementation and Effects, and Evaluating Implementation at Scale.

This report presents findings from the first stage of this work, a year-long qualitative case study of two higher and two lower value-added high schools chosen based on their success at improving the academic achievement of low income, minority and English Language Learner (ELL) students. The case study was designed to help answer the following research questions:

What makes some high schools more effective than others serving comparable student populations?

What are the components of these effective high schools and what are the ways in which educators develop, implement, integrate, and sustain them?

What are the bundles of policies and practices that effective schools use to orchestrate the essential components into successful outcomes for all students?

In its next stage of work, the Center and our district and school partners will use findings from the case study work to collaborate on a design for an innovation to be implemented in three high schools beginning in 2013-14.

Section II: The Essential Components: A Guiding Framework

The Center work is guided by eight essential components of effective high schools that emerge from a comprehensive review of the high school reform literature (e.g. Dolejs, et al., 2006; Murphy, Elliott, Goldring, & Porter, 2006).

In our fieldwork, we identified two additional components that emerged from the data analysis and that seemed to be related to school effectiveness in the two higher value added schools: *Organization of the Learning Environment* and *Variability in the Schooling Experience*. We provide annotated definitions of each component below; the emergent components are denoted with an asterisk.

The Ten Components of Effective Schools

*Learning-Centered Leadership***:** Principals in effective high schools engage in leadership that prioritizes student learning. They possess an ambitious vision for learning and hold high expectations for all students and staff. Such leaders: (1) set a vision with specific priorities around student learning; and (2) facilitate continued school improvement and support for improving instruction through collaborative, shared leadership. They engage both school-level factors (such as the school mission and faculty governance structures) and classroom-level conditions (such as student grouping and instructional practices) to focus staff, resources, and improvement strategies squarely on students' academic and social learning.

*Organization of the Learning Environment: Effective high schools organize the learning environment around student achievement. They demonstrate flexibility and intentionality in their hiring and assignment of teachers and support personnel and the assignment of students to classes to adequately meet the needs of students.

Culture of Learning and Professional Behavior: School personnel in effective high schools take part in a strong culture of learning and professional behavior. This culture is defined by a shared focus on high expectations for students and emphasis on students' academic needs among the administration, staff, and faculty of the school. Students internalize these cultural values, as well, to take responsibility for their own learning and work together to promote their academic success. Finally, effective cultures of learning are collaborative, with individuals across organizational levels working together to meet the school mission. Such collaborative activity is strongly supported by the school leadership, both through careful development of structures and the devotion of necessary resources.

Systemic Performance Accountability: Schools that exhibit systemic performance accountability have faculty and staff who hold clear expectations for student performance that reach beyond external accountability pressures. Personnel in these schools focus on student academic outcomes and continuous improvement on explicit performance targets, and implement initiatives to reach those goals.

Collective responsibility is characterized by a shared belief that teachers and schools not only are capable of affecting student learning, but that they have a collective obligation to do so.

Participants respond to external student learning measures or accountability structures in ways that signal a belief that they are legitimate measures of school success.

Personalized Learning Connections: In effective schools, individuals report strong connections between the students and the school, as well as widely distributed meaningful relationships among students and adults at the school. At effective schools, connections between students and adults are authentic, relevant, and responsive to students' needs and interests. The opportunities for connections among students and the school interact and build upon one another. For instance, personalization and positive relationships are contingent upon the organization and structure of the school.

Quality Instruction: Teachers engaging in quality instruction: 1) meet the individual needs of their students with individualized/adaptive pedagogy; 2) use collaborative learning strategies; and 3) practice authentic pedagogy that relates to students' lived experiences. In turn, quality instruction develops classrooms characterized by students' intrinsic motivation, retention of material, and positive attitudes toward learning.

Rigorous and Aligned Curriculum: Effective schools that have a rigorous and aligned curriculum: 1) set clear curriculum standards; 2) align the curriculum with state, district, and school standards and assessments; 3) implement the curriculum with consistency and integrity to the standards; and 4) have a rigorous curriculum that includes ambitious content and high cognitive demand for all students. That is, they ensure the availability of college preparatory courses to all students and engage all students in complex content and demanding activities that focus on inquiry and higher order thinking, not just memorization and computation.

Systemic Use of Data: Effective high schools are data-driven and have information-rich environments where school personnel operate in a culture of data use targeted toward improving the learning experiences of students. In these schools, streamlined information management systems are in place, giving individuals across organizational levels ready access to comprehensive sources of data. Administrators, teachers, and staff are well trained in the use of these systems, and systematic efforts have been made to build the capacity of all school personnel to make meaningful use of available information. Finally, faculty and staff use these resources to take action, working collaboratively to target students for intervention, adapt instructional practices, and promote student success. In so doing, they demonstrate an internalized "culture" of data use, in which the necessity and beneficial nature of data-driven practice are an accepted organizational perspective.

*Variability in Schooling Experiences: School personnel in effective schools recognize that students' experiences may vary and understand that policies, practices, and programs implemented at the school level can help to promote positive educational experiences across subgroups of students. Effective schools work to compress variability in student outcomes by promoting equitable access to school resources, setting high expectations for all students, and identifying opportunities to promote inclusiveness in all aspects of the schooling experience.

Connections to External Communities: Effective schools actively work to build deep, sustained connections between the school, parents, and larger school community that advance academic and social learning. Two elements make up *Connections to External Communities*: (1) *parent involvement*, i.e., what schools encourage parents to do at school and what parents do at home to support their children's learning. An important element of parent involvement entails teachers' and administrators' roles in reaching out to parents and creating a culture that supports parents' reaching in; and (2) *connections to the larger community* that enhance and support students' learning opportunities. Effective community-school partnerships require structural support, trust among partners, and investment in collaborative work.

Section III: Study Context and Research Design

Study Context and Selection

With its focus on high schools in large urban districts, the Center has partnered with the sixth largest school district in the country, Broward County Public Schools (BCPS), which includes Coral Springs, Ft. Lauderdale, Hollywood, and Plantation, Florida. The district serves large proportions of traditionally underperforming student subgroups, including those who are low-income, minority, and ELL. The student population during the 2010-2011 school year was 38 percent African American, 28 percent Hispanic, 27 percent white, and 7 percent other. In the district, 48 percent of students are eligible for free or reduced-price lunches and 10 percent are classified as ELL. BCPS has been engaged in a high school reform effort for the past nine years. High school reform goals include fully integrating an academic system that includes high standards, curriculum, instruction, assessments, and supports. Specific strategies include increasing enrollment in Advanced Placement courses by using data (i.e., PSAT, SAT) to identify students; creating networks that enable schools to share resources (i.e., high-performing teachers sharing best practices across schools); and providing a structure for ongoing professional development (i.e., professional learning communities meeting on a weekly basis). Other strategies include increased monitoring of programs, credit recovery programs, weekend classes, math/reading intensive skills classes, and dual enrollment for students. BCPS has achieved national recognition for its efforts to improve chronically low-performing schools and was a top-five finalist for the Broad Prize for Urban Education in 2008, 2009, and 2011. Ten BCPS high schools were recognized among *Newsweek* magazine's top high schools in the nation in 2009. Despite these successes, BCPS has repeatedly failed to meet overall reading proficiency goals and both reading and mathematics proficiency goals for African American, economically disadvantaged, and ELL-eligible students.

The district was identified using a simple value-added achievement model (VAM) to estimate the relative performance of the state's high schools. The estimated fixed effect for each high school in the state was put in rank order and classified by deciles of value-added. Broward County Public Schools, with multiple high- and low-performing schools serving our target student subgroups, was chosen. Four high schools in the district – two higher-performing and two lower-performing – were selected for case study on the basis of findings from the VAM analysis. Separate analyses were conducted for math and reading, as well as for our student subpopulations of interest (free and reduced-priced lunch, ELL, and African American and Hispanic). Drawing from this data, we selected the two high and two low value-added schools for in-depth investigation. As school effectiveness varies by performance criteria, we focused on the average ranking of the schools in math and reading in each category. Broward County is a choice environment with multiple schools of choice including schools that have choice programs embedded within them.

Accountability Context

All four schools were nested in federal and state high stakes accountability contexts and faced pressure from three main policies: the federal Adequate Yearly Progress provision (AYP), Differentiated Accountability, and Florida's A++ policy. AYP is the provision in the No Child Left Behind Act (NCLB) of 2001 aimed at identifying whether schools and districts are on track to reach each state's annual academic goals and final goal of universal proficiency in math and language arts by 2014. Schools not making AYP face sanctions that grow increasingly severe each time they fail to meet stipulated performance standards (No Child Left Behind,

2001). While NCLB has an emphasis on improving achievement with targeted subgroups, the Differentiated Accountability plan in Florida monitors AYP and adds further sanctions and supports to schools not meeting targets. Florida's A++, implemented prior to NCLB, is a state-created accountability system. The policy grades each public school A-F based on a combination of student achievement scores, student achievement gains, graduation rates, and students enrolled in Advanced Placement courses.

In 2009-10, Florida implemented its Differentiated Accountability (DA) program, in which it identified schools most in need of assistance based on AYP and school grades and sought to provide a more nuanced system of supports for these schools. Florida's DA plan classifies schools into six categories (Prevent I, Prevent II, Correct I, Correct II, Intervene, and schools not required to participate in DA strategies). The categorizations require varied levels of state, district, and school interventions based on school grades, progress toward AYP, and changes in student performance (See Table 1). A school's categorization determines the type and intensity of the intervention and whether the intervention is directed by the school, school district, or state Department of Education (DOE). High schools in Prevent I status, the lowest sanction, were expected to implement school-wide interventions monitored by the district. High schools in Prevent II status experienced district direction of reforms and state oversight. High schools under Correct I and II status faced increased district and state oversight of school-initiated reforms entailing progress monitoring and support. A school in Correct I status in the 2009-2010 school year was required to implement district-directed interventions targeting specific subgroups not making AYP with monitoring by the district. Schools in Correct I status could request waivers for deregulation purposes. A Correct II school was required to implement district-directed whole school interventions with both the district and state monitoring progress and offering supports (Florida Department of Education, 2009).

Unlike their non-Title I peers, Title I schools in Correct II status were not eligible to apply for a waiver from district and state oversight. Also, Title I schools in Correct II status were required to implement a school-wide reform. Under Intervene status, the level in which the highest sanctions may be imposed, schools face increased district and state oversight, entailing onsite monitoring and support. Schools in Intervene status are required to choose one of four reconstitution options: convert to a district turnaround school, reassign students and monitor progress, close and reopen as a charter school, or contract with an outside entity to run the school. During the 2010-2011 school year one of our case study schools (B103) was in Correct I status. The other three were in Correct II status (B101, B102, and B104).[5]

Study Design and Data Collection

Fieldwork in Year 1 consisted of classroom observations, focus groups, interviews, observations of administrative team and professional learning community meetings, student shadowing, and document collection during three-week visits to each of the four case study high schools. One visit was conducted in the fall (November/December 2010), another in winter prior to the administration of the Florida Comprehensive Assessment Test (FCAT) (early March 2011), and the last in spring after FCAT administration (late April 2011). We describe our data collection activities here.

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[5] See http://schoolgrades.fldoe.org/default.asp for more detail on how our case study schools compare to other Broward high schools as well as other schools in FL.

Classroom Observations

In total, 685 classroom observation segments (each twenty minutes in length) were scored. The observations provided us the opportunity to compare teacher-student interactions among the four schools. With this approach, we were able to explore classroom organization, emotional support, and instructional support in classrooms across tracks (e.g., regular, honors, Advanced Placement), an important consideration given that the Center's target populations – minority, low-income, and ELL students – are often disproportionately represented in lower academic tracks. In each of the case study schools, observations occurred in English Language Arts (ELA), mathematics, and science classrooms predominantly serving students in 10th grade. We choose to observe in a single grade to compare classrooms across tracks and sequences. We choose 10th grade because it is the last common year in which Florida requires students to take standardized exams in mathematics and ELA.

We used the Classroom Assessment Scoring System for Secondary classrooms (CLASS-S), an observational tool developed by researchers at the University of Virginia, to observe and assess the quality of teacher-student interactions in classrooms. Based on development theory and research suggesting that interactions between students and adults are the primary mechanism of student development and learning (Greenberg, Domitrovich, & Bumbarger, 2001; Hamre & Pianta, 2006; Morrison & Connor, 2002; Pianta, 2006; Rutter & Maughan, 2002), the CLASS-S focuses not on the presence of materials, the physical environment, or the adoption of a specific curriculum but on what teachers *do* with the materials they have and on the interactions teachers have with their students. The observation tool looks specifically at interactions between teachers and students across four domains: Emotional Support, Classroom Organization, Instructional Support, and Student Engagement.

Following the CLASS-S protocol, researchers observed 10th grade mathematics, English, and science classrooms in each school for, at minimum, two class periods to complete the CLASS-recommended four 20-minute observation cycles. One school had block scheduling, enabling us to score six 20-minute cycles.

Focus Groups

To help understand how the programs, policies, and practices that characterize effective high schools are enacted and to gain a deeper understanding of essential components, we conducted six focus groups in each of the case study schools. Three groups involved between five and eight teachers from different departments and grade levels. Another three groups included between five and twelve students who were identified by school personnel as taking primarily AP, honors, and regular/remedial classes, respectively. In total, across all four schools, we conducted 24 focus groups.

Interviews

In total, we conducted 174 semi-structured interviews lasting between 35 and 120 minutes with the principals, assistant principals, guidance counselors, department heads for ELA, mathematics, and science, the eighteen observed teachers in each school, instructional coaches, Exceptional Student Education (ESE) coordinators, ELL coordinators, and behavioral specialists in each school. We interviewed the principals twice; in fall and spring. The interview protocols were designed deductively around the program and practices that support and sustain the "essential components" and inductively to probe for other components that participants credit with school effectiveness.

Observations of Administrative Team/Professional Learning Community Meetings

During our spring visit, we asked to observe an administrative or leadership team meeting. During these meetings, which we observed at all four schools, we kept a log of meeting topics and discussion at five-minute intervals. Also during the spring visit, researchers from each school attended a meeting for teachers scheduled on a professional development day. Three of the schools were following a district-organized professional development activity, while one school opted out of this activity and had teachers meet in groups to discuss student progress.

Student Shadowing and Reflective Interviews

Shadowing activities were conducted with six students at each of the four case study schools. Researchers followed the students' daily schedule by attending their classes and observing them during non-instructional times such as passing time between classes and lunch.

Shadowed students were chosen based on their course assignment track. In each school, we selected three students from "higher" (accelerated/AP) and "lower" (regular) assignment tracks and who together represented the demographics of the student body.

During shadowing, each researcher completed a log at five-minute intervals noting where the student was within a given classroom at the school (e.g., front row, cafeteria), with whom the student was interacting, and the types of activities in which the student was engaged during instructional time. The researcher also took field notes of the shadowed student's activities during both the transition between classes and lunch, focusing on the types of interactions that he/she had with peers as well as with adults in the school.

Researchers ended the shadowing period with a semi-structured reflective interview. The interview focused on the student's educational and social experiences within the school and concluded with a short, reflective discussion in which the researcher asked the student questions that probed the academic and social experiences noted by the researcher during the course of the observation.

Documents

We collected a set of documents from each school, including, for example, master schedules, pacing guides, teacher candidate interview forms, and lists of community partners. We also collected documents as they were referenced by study participants. For example, the master schedules were used to conduct an analysis of the courses at each case study school. (See Section IV for more details of this analysis.)

Data Analysis

The CLASS-S tool was scored, and interviews and focus groups were recorded and transcribed verbatim.

Pattern coding of interview and focus group transcripts, field notes, and documents were used to identify central constructs in the data (Fetterman, 1989; Miles & Huberman, 1994;Yin, 1989). We began by coding our data with codes from our conceptual framework. As previously described, our conceptual framework is built around eight a priori components associated with effective schools (Murphy, Elliot, Goldring & Porter, 2006; Goldring, Porter, Murphy, Elliot, Cravens, 2009) and two additional components that emerged during data collection and the subsequent data analysis.

Each of the components encompasses two to five subcomponents (See Appendix B for definitions; Appendix C for a complete list of codes used in NVivo). In this section, we first discuss the iterative process in which researchers used in the data collection and analysis process. We then discuss how each individual set of data were analyzed for the study: interview and focus group data, Class S, and shadowing, respectively.

Preliminary Analysis of Field Notes

Our first data analysis occurred while still in the field. In between data collection and analysis, we used a multistage approach to analyze researchers' field notes. Field notes were kept in two forms. Personal interaction forms (PIFs) were completed by researchers within 24 hours of conducting an interview or moderating a focus group. School-level analysis forms (SCAFs) were completed by the three members of each school's research team together twice during each of the week-long visits.

In Stage 1 of our field note analysis, we participated in two "mapping" sessions. These sessions involved reviewing research notes, comparing and contrasting our perceptions and experiences, searching for connections, and seeking explanations for patterns within the data. Specifically, we "charted" preliminary findings, including our conjectures about the relationship between how the components were enacted and their outcomes, from observation data and field notes for each of the sampled schools. For this, we examined the extent to which the eight "essential components" and later two emergent components were manifest and whether differences existed in their manifestation between the higher- and lower-performing schools.

In Stage 2, we analyzed the PIFs and SCAFs systematically. We recorded the evidence (for or against) each of the preliminary findings from the first analysis stage. In addition to reviewing the field notes for evidence of the preliminary findings from Stage 1, we also recorded the evidence for each of 24 subcomponents that defined our essential components. We then looked again across the resulting tables for similarities and differences among the schools, noting follow-up questions and data sources to explore in future data collection rounds. Specifically, we developed data collection plans outlining future methods of data collection, data sources, and needed instrumentation development for subsequent visits. These plans, in conjunction with reports from the preliminary analysis of data from prior visits, were used to develop research schedules at each of the case study schools.

Coding and Analysis

To help establish dependability, multiple analysts (i.e., coding pairs/triads including at least one "senior" researcher with experience using NVivo and a "junior" researcher) coded the data.

We used a three-phase approach to guide the data coding and analysis. The initial round of coding involved a subset of twenty-eight data files across participant and data types. The purpose of this round was multi-fold: 1) To construct definitions for codes for each component and subcomponent; 2) To identify qualitative dimensions in the subcomponents where they exist; and 3) To identify any emergent themes that may not be captured under existing subcomponents. Coding in round two involved re-coding and analyzing data coded in the first round. During this process, each pair/triad engaged in a reliability-building process. The pairs coded the first twenty-eight files individually. Then they ran the Kappa score function in NVivo and met as a team to systematically discuss and compare coded text. After this process, members of the pair/triad in the third round coded seventy-five additional files, chosen to equally represent

schools and data types Coding this subset of files enabled teams to reach data saturation (i.e., no new evidence or additional themes emerged from the data as coding progressed). The full coding team met weekly to share findings and discuss emerging themes.

Each pair/triad wrote memos throughout the coding and analysis process. These memos are recorded the products of the analyses of the components/themes that emerged (Corbin & Strauss, 2008) and were intended to identify the properties and dimensions of our components as they were manifested in our case study schools. Specifically, analysts were asked to respond to the following set of questions in each memo:

•How are the "essential components" and their related subcomponents manifest (or absent) at each case study schools?
•How and to what degree are these components manifest?

•What makes these each school unique, as compared to the other sampled schools?
•What are the similarities and differences between the schools?
•What differences exist within each school?

CLASS-S Analysis

To assess the quality of classroom instruction across our four case study schools, we targeted 10th grade English/Language Arts, mathematics, and science classes in fall, winter, and spring of the 2010-2011 school year. Seventy-three teachers were observed, with between two and seventeen segments of twenty minutes each coded for each teacher (for a total of 685 segments). As research on tracking in high schools suggests that higher-track classes tend to have higher-quality instruction than lower-track classes, we wanted to assess whether this was occurring in our cases study schools, as well as whether higher VA schools "compressed" the instructional quality between their higher- and lower-track classes more than lower VA schools. To increase the number of honors (and above) classes observed in each school, a small number of additional honors classes were sampled in 9th, 10th, and 12th grade. For example, we asked to observe a higher-track course taught by the same 10th grade teacher whom we may have already observed teaching a regular track course and vice versa. These classroom observations were coded using the Classroom Assessment Scoring System – Secondary (CLASS-S) described earlier. See Appendix D for more information on this analysis.

Shadowing Analysis

We were also interested in understanding how students in our study spent their time in school. We therefore analyzed our shadowing log activities from Year 1 Fieldwork. In April 2011, 24 10th grade students were shadowed for a full day by a researcher. Starting at the beginning of the school day, the researcher logged the student's activities every 5 minutes. The log asked for several pieces of information: the time, the period of the day (i.e., first period, second period), where the student was located, what the student was doing, with whom the student was interacting, and whether the student was on-task or off-task. The log had specified categories for the location (e.g., classroom, hallway, lunchroom), activity, and with whom the student was interacting, although the researcher could also write in other activities or provide more details such as what the student was discussing during an interaction.

Students were observed for a total of 1,670 five-minute segments. These segments are roughly equally distributed across schools (i.e., each school represents 23-27 percent of the observations). Of these five-minute segments, students were observed during class time for 1,521 segments (91

percent). The remaining 9 percent of the observation segments were during lunch or between class periods. Note that this may overestimate the amount of time spent in class as it was difficult to follow students for the entire lunch period. The amount of time observed during class time was equally distributed across schools.

Section IV: School Case Summaries

We present our data in two ways. Here in section IV, we provide descriptions of each case study school that integrate findings from each of our ten components. Through these case studies, we provide a systemic overview of each school to both facilitate comparisons and present each school as a comprehensive system.

We begin by describing two schools in our study, B101 and B102. Both were identified as having lower VA gains with their low-income, minority, and ELL students. We then turn to B103 and B104, the schools that were identified as having stronger gains with their low-income, minority and ELL students. For each case, we begin with a brief description of each school and then systemically review the ways the ten components are developed, implemented, and sustained.

School B101

School B101 was a low-VA (LVA) school with between 1,900 and 2,300 students in 2010. Students qualifying for free and reduced-priced lunch made up 45-55 percent of the student body. Approximately 55-65 percent of the population was minority and 5-10 percent of the students were classified as English language learners. Its school grade has fluctuated from As to Bs over the last several years. During the 2010-2011 academic year, it was placed in Correct II status by the state of Florida.

In terms of its formal structure, B101 had a principal and four assistant principals. These five made up the administrative team. They met once a week to discuss administrative issues. The leadership team, which met every two weeks, consisted of the principal, assistant principals, the department chairs from all of the core curricular areas, the media specialist, the behavior specialist, the ESE specialist, and the reading coach. Each assistant principal was assigned to one of four areas: (1) activities, field trips, and substitutes, (2) scheduling, (3) oversight of facilities, and (4) safety and security. Assistant principals were also assigned to departments and grade levels. In describing the leadership structure at B101, participants used terms such as transparent, collaborative, and communicative. However, decision-making appeared to be relatively centralized. There was some evidence of joint decision-making among and between the administrative team and the leadership team. The extent to which shared governance filtered down to the teachers, students, and other stakeholders, however, was unclear.

The principal at B101 reported that his vision for the school centered around helping students to reach their full potential. Although this vision was echoed by several members of the faculty, other faculty members reported that the principal's vision focused on developing a sense of community for faculty and students.

In terms of culture of learning and professional behavior, participants reported that informal collaboration occurred largely within departments. Administrators reported that some opportunities existed for professional development and collaboration through Professional Learning Communities (PLCs), 9th grade "teaming", and shared planning but that these were not equally available to all teachers. Participants said that collaboration in the school had a moderate instructional focus, with opportunities to share "best practices" and ensure curricular alignment. Faculty support for school polices was reportedly mixed, with the principal, for example, reporting that volunteerism was high for his new mentoring program although some instructional practices he tried to implement had encountered pushback and resistance.

Teachers articulated a generally collegial and positive climate among the faculty within academic departments. Participants reported feeling supported by the administration, and said there was generally a high expectation for faculty performance. Expectations for students were mixed, however – especially for those students who had been placed in honors and AP classes. Many reported feeling ambivalent about the faculty's ability to meet the demands of a changing student demographic, and its ability to push lower-performing students placed in advanced classes.

Participants reported a mixed culture of learning among students. Some reported high academic focus among higher-performing students, but low academic focus among lower-performing students (lack of engagement, unwillingness to do homework, etc.). Participants indicated that there were some school-wide initiatives to promote student culture of learning (mentoring program) but that many efforts were individually motivated (teachers staying after school to help students, etc.).

The principal at B101 said the faculty shared a high degree of collective responsibility, born out in terms of the school's initiative and academic success. While there appeared to be a sense of collective responsibility for student achievement within individual departments, the evidence was mixed in terms of the extent to which faculty felt individually responsible for student success. Administrators and faculty expressed concern that students lacked the necessary skills and motivation to succeed at the secondary level. Multiple students complained that teachers "don't care" or perhaps had given up on them.

Many participants at B101 expressed frustration and challenges associated with the external accountability structure, largely centered on the demands and burdens of standardized testing. Participants identified a number of internal accountability practices such as classroom walkthroughs, observations, and "3-D chats" used to promote the adoption of instructional practices advocated by the school and to hold teachers accountable. In terms of accountability for students, teachers and students alike consistently reported problems with student behavior and attendance. Reports suggested that cheating among students was pervasive and teachers were not surprised by this behavior. While there was reportedly a strong school-wide focus on discipline at B101, some participants described inconsistencies in other faculty members' support and enforcement of discipline policies as well as the administration's consistent enforcement of the policies. Only some participants viewed the policies as positive and promoting a safe learning environment.

B101 used the district-mandated course assignment system to assign students to courses. Participants at B101 reported that at the beginning of the year it was relatively easy for students to change their courses; this became more difficult as the marking period progressed. In terms of assignment of teachers to courses, administrators and department chairs at B101 drew on teacher requests/preferences and consideration of student needs.

Participants in B101 detailed an intensive system of classroom oversight in which assistant principals conducted frequent classroom walkthroughs (CWTs). These walkthroughs, according to participants, focused on instructional practices the administration had previously emphasized in meetings and professional development for staff: word walls and common board configurations. The principal referred to this system of oversight as the backbone of the school's accountability efforts and spoke of the school's system of observations and "3D chats" – talks with teachers every three weeks during which performance data are reviewed -- as effective in getting teachers to adopt the instructional practices advocated by the school. Teachers in B101 confirmed the regularity of CWTs and reported having a positive attitude toward the amount of observation and

supervision they receive. Interestingly, CWTs were reportedly "non-evaluative," and thus, according to the principal, did not result in formal feedback to teachers. If assistant principals identified an issue during a CWT, however, they let the department head know and the department head would "take care of things." While CWTs appeared to be a major part of the life of the school, feedback to teachers in B101 was reportedly based on performance data, not teacher observations. Participants reported that feedback is primarily given as "issues" arise and as part of an annual evaluation process.

Participants reported having access to performance data that was generated both external (e.g., student-level scores from the Florida Comprehensive Assessment Test (FCAT), Broward Assessment Test (BAT), Advanced Placement Test (AP)) and internal (e.g., grades, classroom observations, informal/formative assessment, student surveys). Virtual Counselor and Pinnacle are the primary systems for accessing performance data.

Participants in B101 reported that data are used for a variety of purposes, including the identifying and targeting of students for intervention, teacher evaluation and professional development (PD), student assignment, staffing decisions, school classification, and the adaptation of instruction. By and large, the most common uses of data were reportedly for targeting of students and evaluation (both of teachers and of student progress). Several participants indicated that internally derived, informal data were useful in modifying practice. Teachers in B101 also reported that they participated in the culture of data use in the school because it was expected, but that they did not find particular benefits or utility in doing so. Teachers indicated that they relied primarily on internally generated data because they doubted the validity or usefulness of externally generated data like the FCAT or BAT. Of those who reported frequency, most said they used data frequently, with some indicating that use was more intermittent. Administrators reported conducting "3-D chats.". Other participants indicated that they did participate in data chats, which were reported as being relatively frequent (every 3 weeks), but many said they felt little benefit from such activities.

In terms of personalized learning connections, participants reported that B101 had multiple extracurricular and athletic opportunities for students. However, according to reports, student participation in activities, school pride, and spirit were moderately low. The principal attributed lack of participation to a lack of motivation on the students' part, not to any failure by the school to offer multiple programs to foster stronger personalization. While participants reported efforts to promote school-wide connections, they acknowledged that they were not always successful, with some students falling between the cracks. B101 did have a mentoring program aimed at pairing the lowest-performing students with mentors such as teachers, coaches, and administrative staff. The development of connections between school personnel and students, therefore, was largely individual when it occurred. Administrators and counselors described an environment in which the upper-level student had stronger connections to adults than the lower-performing student. Although there was evidence of systems in place to support relationships between students and the Guidance Department, counselors repeatedly identified large caseloads as a constraint to developing personalized connections with students.

In terms of instructional practices at B101, administrators and faculty reported using data to tailor instruction to student needs. However, in interviews, teachers reported little evidence of using feedback, scaffolding, or prompting to extend students thinking in instruction. Many participants referred to the use of student collaboration in the classroom, but there was no discussion of its purpose or results.

In terms of curricular alignment, participants reported high curricular alignment to state and district standards. While administrators reported that the district's instructional focus calendar (IFC) is modified to meet students' need, the evidence from teachers was mixed. Some suggested that modification was possible while others indicated that following the IFC is non-negotiable. Along these same lines, teachers cited the IFC as a major constraint to instructional flexibility. With the exception of some expectations to align the curriculum across grade levels through vertical teaming in math, social studies, and, to a lesser degree, science, there is no other evidence of teachers working together to align the curriculum (e.g., alignment with feeder schools, within departments). There is evidence that school-wide initiatives have been implemented at B101 to encourage alignment across the school curriculum (e.g., reading across the curriculum; board configurations). However, all of the initiatives are not required and there is evidence of low faculty buy-in.

In terms of rigor, there is the perception among participants that some courses are more challenging than others. Administrators expressed frustrations with the assignment matrix and the district's policy to increase enrollment in honors and AP courses. Their concerns were centered around the range of student's abilities in classes and the potential threat that poses to rigor. Teachers echoed the sentiments of administrators regarding a push to increase enrollment in AP and honors and reported that rigor in honors and AP class, in particular, is compromised due to mismatched assignments. Some students also suggested that the rigor in Advanced Placement classes is, at times, compromised by the assignment of less capable students. The process to "opt out" of advanced classes is quite flexible at B101, particularly at the beginning of the school year.

In terms of relationships with external communities, teachers and administrators provided examples of school personnel reaching out to parents to create a culture that supported involvement. Administrators and teachers engaged in efforts to promote relationships with community business partners.

In sum, B101 had a traditional high school structure organized around subject matter departments and the tracking of students by ability group. Administrators and teachers responded to state and district accountability policies through practices such as aligning the curriculum, employing the district's student assignment matrix, and using data to identify low-performing students. Despite stated efforts by the principal to articulate a vision for the school, not all faculty shared this vision. While there were efforts to provide academic and social support to students, these activities largely occurred in pockets. Participants described mixed expectations for students and problems with cheating, behavior and attendance. In addition, they described relationships with external communities as weak.

School B102

B102 was also a LVA school. During the 2010-2011 school year, B102 had between 1,600 and 2,000 students, 60-70 percent of whom qualified for free or reduced-priced lunches. Fifty-five to sixty-five percent of the student population was of minority status and 10-15 percent were classified as English language learners. The school grade has moved between a "C" and a "D" over the last several years. The year of our study, it was in Correct II status based on the state of Florida's Differentiated Accountability system.

In terms of its formal structure, B102 had a principal and four assistant principals. These five made up the administrative team. This team met once a week. Once every two weeks during school hours, the principal convened the Leadership Team. The administrative team, department

heads and four academic coaches (reading, math) regularly attended this meeting. It was also open to teachers and community members. Each assistant principal was assigned to oversee two or three departments as well as a group of students (based on the first letter of the students' last names) for disciplinary matters. The one exception was the 9th grade assistant principal who oversaw all 9th grade students.

Leadership at B102 appeared to be primarily centralized. There was some evidence of joint decision-making between the administrative team and the leadership team. However, there was little evidence that non-administrative personnel were involved in decision-making. Teachers reported having a shared sense of direction for the school among themselves; however, some felt that administrative support was lacking.

While faculty and administrators at B102 agreed on a common vision for the school around raising student achievement and the school's accountability grade, we found that there was a pervasive disconnect between administrators' and teachers' perceptions of school practices. The principal and other administrators reported following through on disciplinary referrals, while multiple faculty members complained of slow to little follow through. Administrators described a process of classroom observations and feedback; however, teachers criticized administrators for little or no feedback after observations and little instructional support. Administrators described student data as shaping school practices; teachers questioned the approaches such as data chats and reporting practices, as well as the validity of the data itself. There was little discussion by either leaders or teachers about leaders' engagement around curriculum. Taken together, participants described a common focus around improving student achievement, yet little consensus around the success of school-level practices toward meeting this goal.

In terms of a culture of learning and professional behavior, participants reported that collaboration largely occurred within departments or subject areas. While there were structures for collaboration across departments, in the form of Professional Learning Communities (PLCs) in which groups of teachers came together around a common theme such as parental involvement or Algebra 1, not all had an instructional focus. Teachers described a largely positive climate within departments and among the faculty. Some, however, identified morale issues and the lack of support from the school administration. Some expressed a weak sense of efficacy regarding the principal's ability to lead the school and solve its problems. Participants reported mixed expectations for student performance, and a mixed sense of efficacy regarding the staff's ability to promote achievement and growth among the school's student population.

Administrators and teachers reported that there were school-wide professional development (PD) efforts, specifically around training in "differentiated instruction" and reading strategies, although some departments (of tested subjects) may have been more exposed to such opportunities than others. Participants reported that classroom observations in the school were largely centered around evaluation. Participants reported that classroom walkthroughs in B102 were conducted internally by administrators. CWTs were reportedly not used to provide individual feedback; some administrators, however, said they did provide informal feedback to teachers if they felt it necessary. Participants reported that the primary purpose of CWTs was to generate "trend" data used by the administration to monitor and evaluate instructional practice in a department or school as a whole.

Participants reported a mixed to weak sense of academic focus among the student body, and described the high-performing students enrolled in Advanced Placement and honors courses as marginalized. To promote a stronger culture of learning among students, the school

administration initiated programs based on student test scores—such as financial and trip incentives for improvement on the FCAT—that were poorly supported by faculty.

With their Correct II status and their focus on improving test scores, participants said that the principal of B102 had fully embraced the external accountability structure. Yet, within this context, the administrators and teachers tended to attribute the school's poor test scores to students' lack of prior achievement in elementary and middle school, their backgrounds, or students' lack of effort rather than their own activities. Participants reported a mixed sense of collective responsibility toward students. Administrators identified a number of internal accountability practices such as classroom walkthroughs, the monitoring of classroom pass rates, review of teachers grade books and students' BAT and FCAT scores to hold teachers accountable for student performance. The principal also reported publicizing teachers' students' FCAT scores to the entire faculty in an effort to motivate teachers to improve their effectiveness.

Participants reported that they had access to extensive data for use in their practice that were both externally generated (FCAT, BAT, SELA, FAIR, mini-BAT) and internally generated (grades, informal/formative assessment, attendance data, classroom observations). They reported ready access to such data through Virtual Counselor, Pinnacle, TeachScape and BRIO (counseling system). While participants in B102 reported that data were used for a variety of purposes – rewarding student incentives, student assignment, staffing decisions, and modifying instruction, for example – a heavy emphasis was reported on evaluation of performance, accountability, and the identification or classification of students in the school. Despite a strong focus by the administration on using data, participants in B102 reported a mixed culture of data use, with participants tending toward a negative perception of the benefit, utility, and pervasiveness. Negative perceptions of the culture of data use were exacerbated by the reportedly high test load in the school, which several teachers said negatively impacted their practice.

In terms of personalized learning connections, participants reported that B102 had multiple extracurricular and athletic opportunities for students. However, participation and a sense of belonging were not evenly distributed across the student body. Participants described students in the AP/Honors track as extremely motivated both in- and outside the classroom. They also described them as having more connections to the school. Students in the regular tracks were described as having more problems with attendance, motivation, and behavior. Along these same lines, participants reported that adult-student connections were often shaped by students' individual involvement in extracurricular activities, their personal levels of motivation, and their behavior.

With regard to the organization of the learning environment and its support of personalized learning connections, the school organized the guidance office by assigning 9th grade students to one counselor and then 10th, 11th and 12thgrade students alphabetically to the other counselors. While assistant principals were paired with a guidance counselor, they were also assigned a grade, so there was no looping. Participants described that no other formal structures were in place to personalize students' educational experiences or give them or their parents access to academic and social supports. Guidance counselors described large caseloads of students and only seeing students and parents in crisis situations or when students and parents took the initiative. Guidance counselors reported that they spent two-thirds of their time on state and district testing requirements and the remainder meeting with students.

B102 used the district-mandated course assignment system to assign students to courses. Participants at B102 reported that the school adhered to the policy; however, they allowed student assignment changes well into the school year. In terms of assignment of teachers to courses,

administrators and department chairs at B102 drew on teacher requests and preferences, teacher and student performance data, and school needs.

When discussing instructional practices at B102, participants identified strategies, such as activities to promote higher order thinking skills and authentic pedagogy, but provided little evidence of their use. Participants described wide variation in the use of individualized pedagogy and limited evidence of the use of feedback, scaffolding, or metacognition. Many participants mentioned using collaborative teaching strategies, but did not discuss its purpose or results. Participants seemed to pay lip service to developing the higher order thinking skills of students.

In terms of curricular practices, participants consistently reported being bounded by state and district standards. English, reading, and social studies teachers described horizontal alignment of their curriculum with teachers working together to develop pacing/curriculum guides and assessments. While there was evidence that the principal encouraged vertical alignment with the curriculum, this was not always implemented by faculty nor was there any evidence of vertical alignment with B102's feeder schools beyond routine visits to introduce the school to eighth grade parents and students. The principal described monitoring classes to gauge the extent to which subject area teachers were aligned in terms of instructional pacing. He also described providing time for teachers to develop "model lessons" and promote curricular alignment within subject areas though none of these practices were discussed by teachers.

Participants described very low parent involvement in their children's education either at home or school. They also described connections with external communities as weak.

B102 also had a traditional high school structure organized around subject matter departments and the tracking of students by ability group. In large part due to their accountability status, administrators and teachers identified improving student achievement as a common goal and aligned the curriculum and used data to identify low-performing students. Despite this stated vision, though, participants described frustration at its enactment, particularly around student support. Faculty did not feel supported in behavior management and some did not buy into the heavy FCAT focus. While there were efforts to provide academic and social support to students, these activities were weak. Participants described mixed expectations for students with those in the highest track isolated but challenged, and students in the lower tracks getting pockets of support from instructional and counseling staff.

School B103

School B103 was one of the two HVA schools and enrolled approximately 2,000-2,400 students during the 2010-2011 school year. Students eligible for free and reduced-price lunches represented 45-55 percent of the student population. The majority of the student body was minority in nature (i.e., African-American, Asian, Native American or Native Indian, Native Hawaiian or Pacific Islander or multi-racial), comprising between 65-75 percent of those enrolled. Between 5-10 percent of students were English language learners. Its school grade had been 'A' over the last several years. During the 2010-2011 school year, it was in Correct I status by the state of Florida.

In term of its formal structure, B103 had a principal and four assistant principals who were assigned to each grade level. These five comprised the Administrative team. This team met once a week. Once every two weeks, the principal convened his Leadership Team. This team was comprised of the principal, assistant principals, curriculum leaders (department heads), and the

ESE Coordinator. Team leaders who facilitated small learning communities (SLCs) of teachers in science, social studies and English/language arts were also a major part of the leadership structure at B103. The assistant principals and team leaders met on a monthly basis, the first Friday of every month.

Instructional leadership was perceived as one the school's major strengths. Although decision-making appeared to be somewhat centralized to the leadership team which is comprised of the principal, assistant principals, curriculum leaders, participates reported that there is major emphasis on the use of instructional leadership teams and student government to gain input from both instructional and non-instructional staff, as well as students, for administrative decision-making. Administrators, teachers, and students, alike, reported that there are opportunities to provide input and that everyone had a "voice". There was a shared vision that centered around high expectations for student learning and accountability for all school participants that was clearly articulated and promoted through the school's motto. The principal reported that accountability was among one of his top three priorities. This was echoed by teachers who reported that the school's grade, accountability for teachers, and high quality instruction were priorities at B103.

In terms of a culture of learning and professional behavior, participants reported that collaboration in B103 largely occurred in SLCs – teams of teachers in the 9th and 10th grade sharing common students. Administrators and counselors were folded into these SLCs, allowing for easier collaboration across organizational levels. Looping occurred in 9th and 10th as well, wherein students stayed with their APs, guidance counselors and some teachers for the two consecutive years. In the latter grades (11th, 12th), collaboration was reported as being focused in academic departments, with professional study days and PLCs offering avenues for across department collaboration. Collaboration was reported as being both frequent and instructionally focused (although much of the collaboration in SLC's revolves around student issues, etc.). Participants also reported a strong, shared vision among adults in the school centering on high expectations. Participants reported largely collegial relationships among departments and SLCs, and a high sense of efficacy regarding the school's ability to meet challenges and promote student achievement. Overall, there was support among the faculty for school policy with some pockets of resistance.

Participants reported a high perception of academic focus among the student body in B103. Some, however, noted that some lower-performing, lower SES students had issues with motivation and engagement. Participants reported, however, that the school had numerous structures in place to support the student culture of learning and that these are widely advertised, incentivized, and highly supported/resourced by school leadership. Participants also reported that the school's culture of high expectations drove the student culture. Participants did report that the school's choice component was a likely source of strong student culture of learning, as well.

Participants reported that formal PD in B103 occurred on professional development days and that it was largely individualized, although highly supported. Participants reported that they did, however, receive feedback from administrators through classroom observations, and that informal professional development (modeling, observing other classes) did occur.

Administration reported looking for evidence of student engagement, bell-to-bell instruction, and differentiated instruction. While, administrators and teachers alike described a process of classroom observations and instructional feedback designed to meet instructional and accountability goals, there were varied responses in terms of the frequency and the value of the

classroom observations (i.e., duration of walkthrough does not lend itself to meaningful feedback).

Participants reported that they felt generally supported by the school administration, and that there was some degree of participatory leadership (particularly among AP's). Participants referenced numerous structures – including SLC's, PLC's, shared planning, physical proximity – that supported the culture of learning in the school. Some participants indicated that physical resources – including the school's physical plant –were an issue. One participant noted, however, that there was a culture in the school of "doing more with less".

Participants reported a strong sense of accountability for all school participants at B103. The principal in B103 often referred to holding administrators, faculty, and non-instructional staff accountable for professional behavior and student performance. Students were also reportedly held accountable for their academic achievement and social behavior. It should be noted that reported concerns with student classroom behavior at B103 were centered around talking out of turn, rather than on cheating, extreme misbehavior, and excessive absences. Some teachers embraced the strong level of accountability at B103, and perceived it as a strength of the school. Teachers reported receiving both formal and informal feedback back on their performance from administration and department heads through annual reviews, classrooms walkthroughs, data chats and memos. Although there was mixed evidence in terms of perceptions of the value and frequency of classroom walkthroughs, participants reported receiving useful feedback from performance reviews.

Participants reported having access to both externally generated (FCAT, BAT, AP) and internally generated (grades, classroom observations, informal/formative assessment, student surveys) performance data in their practice. Virtual Counselor and Pinnacle were the primary systems for accessing performance data. Participants in B103 reported using data for a variety of purposes – evaluation/PD, instructional adaptation, staffing, identification/targeting of students, student assignment, school classification, and rewarding incentives. There were numerous mentions by participants across organizational levels of using data to adapt instructional practice, although many reported that they used internally derived or informal data to do so. Many participants reported a high frequency of data use. Finally, some participants reported that there was a focus on developing the capacity of participants in the school to make use of data in their decision-making processes.

Of participants who discussed their perspective on the culture of data use, most reported a generally positive perception of the utility and benefit of data use in the school, with some reporting that data was a central part of their practice and others reporting that data use was expected. A number of participants, however, reported that they perceived there to be greater validity in internally-generated performance data, and valued it over externally derived performance data. Collaborative data use was reported as occurring intermittently (although more frequently for some, such as the reading department), usually as data chats occurred at various points during the year.

With regard to personalized learning connections, participants described a school in which there were multiple opportunities for students to become involved in school activities. Reports also suggested, however, that participation was not evenly distributed across the student body. Participants in B103 reported that the school had formal structures in place to develop positive connections between school personnel and individual students: looping and small learning communities. Administrators, teachers, counselors and students all described positive adult-

student relationships. One counselor estimated that 100 percent of students were known by at least one adult. The counselors described themselves as available to all students.

B103 used the district-mandated course assignment system to assign students to courses. Participants at B103 reported that the school supported this policy by prohibiting students from changing courses after the school year had started. In terms of assigning teachers to courses, administrators and department chairs at B103 drew on teacher requests and preferences, consideration of student needs, teacher and student performance data, school needs, and looping.

In terms of quality instruction, teachers, the principal, and a student were positive about using group work as an instructional strategy. The principal viewed collaboration as a means to increase student engagement and understanding. Teachers described concrete strategies for effective pairing of students. Overall, comments about collaboration are more detailed than those in other schools. Participants reported an administrative push toward tasks with "high cognitive demand" and use of questioning strategies to develop higher order thinking skills. Teachers also reported using assessment data to determine prior understanding in order to tailor instruction.

Participants at B103 reported high curricular alignment to state and district standards. The district's instructional focus calendar, along with results from the district and state assessments were reportedly used to develop school-based instructional focus calendars that guided the curricular content, sequence, and pacing to "target student deficiencies across the school" . For example, the Do-Now activities were designed around identified areas of school-wide deficiencies on the BAT. Particular attention was given to aligning assessment benchmarks with curriculum and instructional strategies across grade levels. For example, prerequisite and/or grade-level teachers reportedly collaborated to develop curriculum maps deciding on both the content and depth of instruction for content areas to provide consistency when students transition to the next course/grade level. Participants reported collaborating within departments to develop IFCs/subject area curriculum maps and common assessments.

There was evidence of systemic, ongoing school-wide efforts at B103 to encourage curricular alignment across the school. All teachers were required to post daily agendas – learning objectives and expectations for each class session. "Do-Nows," mini-activities used at the beginning of each class session to immediately engage students, and the word of the day were also used at B103. Additionally, the school participates in a silent sustained reading program for 20 minutes a day in which students respond to a daily prompt based on a selected reading of their choice. The reading coach played an integral role in the development and assessment of these activities (i.e., Do-Nows, regular reading and word of the day), and provided strategy sessions to support reading and instruction across departments. Each of these initiatives was aligned with state and district standards and had been identified by participants as an effective support to improve academic performance. There was, indeed, evidence of buy-in to initiatives that supported curricular alignment and school-wide efforts.

In terms of curricular rigor, participants reported an expectation for exposing all students to a rigorous curriculum. Administrators and teachers acknowledged that the district's assignment matrix posed potential threats to rigor in terms of some students being inadequately prepared for demanding coursework (i.e., students not being prepared for honors or AP courses). But, administrators and teachers reported an expectation that teachers would overcome these challenges by adjusting the lesson and/or rate of delivery without compromising rigor. Participants also reported "pushing" more students into higher level courses by using parents' options to "override" district placement decisions.

Participants described students in the AP/honors track as extremely motivated both in- and outside the classroom. Students in the regular tracks reportedly had more problems with attendance, motivation and behavior. Comments on students' low behavioral engagement, however, were usually followed with statements about school structures aimed at keeping these students focused and motivated (i.e., looping, FCAT camps, small learning communities, academic advising).

With regard to connections to external communities, parents got involved early through the admissions process at B103. Additionally, participants reported that efforts by teachers and administrators to reach out to parents were numerous and purposeful. The school reportedly built relationships with parents through open houses, parent-teacher conferences, and collaborative problem solving team meetings. The SLCs also provided a structure to support teacher-parent communication. While participants said that B103 had considerable parent involvement and structures to support this involvement, the community linkages were notably scant as were the programs or practices intended to build connections to outside agencies and businesses.

As with the previous two case study schools, B103 had a traditional high school structure organized around subject matter departments and the tracking of students by ability group. Also like the other two schools, administrators and teachers responded to state and district accountability policies through efforts to align the curriculum, employ the district assignment matrix, and analyze data. B103, however, had a strong shared vision around increasing achievement for all students. Administrators and teachers described clear, coherent, and deliberate structures to provide rigor for all students as well as social supports to help students needing special services. Teachers described feeling supported by the administration in behavior management. Unlike the other two schools, B103 had more parental involvement.

School B104

B104 was the second HVA school and enrolled between 2,600 and 3,000 students during the 2010-2011 school year. Of those students, between 30-40 percent qualified for free or reduced-price lunches. Students of minority status comprised 50-60 percent of the student population and 5-10 percent of its students were classified as English language learners. The school grade had changed from an "A" to a "B" over the past several years. During the 2010- 2011 school year its Differentiated Accountability status was Correct II.

In term of its formal structure, B104 had a principal and three assistant principals. The Leadership team included three assistant principals, department heads, team leaders and instructional coaches. This team met once a week. Assistant principals were assigned supervisory roles over academic departments and specific grades. The assistant principals do not loop with their students. There are five curriculum specialists: a reading coach, a writing coach, a science coach, ELL coach, and an ESE coach.

At B104, instructional leadership appeared to be widely distributed and reflected a high degree of functionality. Participants reported that the leadership structure was very collaborative and inclusive. Decision-making appeared to be widely shared through the involvement of multiple leadership teams and non-instructional staff. Of particular note was the creation of an instructional coaching team during the 2010-2011 school year that was working to spread practices and reading strategies across instructional departments and coordinate instructional interventions for high needs and lower-performing students. Participants reported that the

administration made decisions based on the feedback from both administrative and instructional staff. Administrators and teachers, alike, reported opportunities to provide input.

Administrators and teachers at B104 articulated a shared vision of the school around a sound and challenging environment for kids. Participants identified academic and social practices that complemented this vision. Academic activities included the principal and administrators conducting regular classroom observations and quarterly discussions with teachers about these observations, administrators looking for word walls and common board configuration, as well as ambitious content and high cognitive demand for students. Administrators, department heads, and instructional coaches described consistent efforts to align the curriculum with state and district standards. Social activities reportedly included efforts by adults to promote positive relationships with students, sponsor school-wide social events (e.g., skating), attendance by administrators at student events/activities, and evidence that administrators check in regularly with low-performing students to discuss their work and progress.

In terms of a culture of learning and professional behavior, participants described academic departments as having inclusive, collaborative cultures, but collaboration across departments reportedly occurred infrequently. PLCs were also reported as serving a strong collaborative purpose, and were organized on the basis of subject areas/"preps" (i.e., course preparations). Participants reported that collaborative activity within these structures occurred frequently – PLC groups, for example, were reported as meeting every two weeks, on average. Collaborative activity was reported as possessing instructional focus, with curricular alignment among faculty members and the sharing of best practices reported as common foci. Administrators and department heads reported strong relationships and collaboration with feeder middle schools. In general, participants in B104 reported a positive climate within the school and within most departments; programs within the school endeavored to maintain this climate through programs like a student-led teacher appreciation week.

Participants reported high expectations for faculty and adult participants in the school, but mixed expectations for students (especially low-performing/low-SES students). Some participants also reported concern about the ability to meet the social and academic needs of the lowest-performing students. Participants reported that structures, such as peer-tutoring, student government, and a leadership class, supported a culture of learning and collaboration among students. They also spoke of a school-wide focus on targeting students in the lowest 30th percentile through personalization. Finally, some participants pointed to the AVID/CAT program as a strong support for promoting achievement among some student groups. CAT is the school's version of AVID that was developed when resources ran low and the school was unable to afford the AVID materials. Students qualified for the program at B104 if they attained a Level 3 on both the FCAT reading and mathematics test and they and their parents signed a contract of commitment.

Participants described informal professional development practices such as teachers mentoring one another and modeling curricular and instructional activities. More formalized, school-wide PD was reported as occurring on occasion during planning periods. In addition, the principal reported a strong focus on cross-training and preparing teachers for leadership positions.

Participants pointed to PLCs and a new instructional coaching team as structures supporting the learning environment. PLCs met frequently and were monitored by the administration. The coaching team reportedly ran regular pull-out sessions for students in the lowest 30 percent of FCAT performance and had instituted and organized the PLC activities and FCAT camps. It also worked with individual teachers who had been identified as in need of improvement. Participants

reported that resources were a problem, and that staffing issues (e.g., layoffs; teachers teaching seven periods) were impacting the culture of learning.

Participants at B104 described a strong system of accountability. Teachers identified student performance as a reflection of their own performance as instructors, but also said parents and students needed to accept more responsibility. Teachers identified a strong collective sense of responsibility both toward students and each other. The principal also described overseeing teachers' activities through actions such as dropping in on specific PLC meetings to monitor their progress. Accountability at B104 reportedly focused more on factors such as professional conduct, punctuality, specific instructional practices, and an obvious concern for students, with less emphasis on test scores. This was evident in the principal's discussion of expectations for faculty as well as in teachers' reports of how they were held accountable.

Participants in B104 reported having access to performance data that were both both externally generated (FCAT, BAT, PSAT, SELA, FAIR, mini-BAT, AP tests) and internally generated (grades, graduation rates, classroom observations, informal/formative assessment, samples of student work, surveys). Participants reported having ready access to data through Virtual Counselor, Pinnacle, and a system designed at the school to integrate data sources – both externally and internally derived. Participants in B104 reported that data were used for a variety of purposes – the assigning students, evaluation/PD, targeting students for intervention, and modifying instruction. The principal described discussing data (attendance, discipline, GPAs, BAT, and AYP) on a weekly basis in meetings with administrators. Several participants said the school emphasized the use of data in for targeting/identifying the "bottom 30 percent" for academic intervention as well as personalized connection. The principal said the school used data to identify students who fell below a 2.0 GPA and intervened with these students immediately. Participants reported mixed frequency of data use, with counselors or administrators generally indicating more frequent use than teachers. The instructional coaching structure reportedly served as a vehicle for targeting of students (bottom 30 percent) for instructional intervention. Collaborative data use was reported as occurring both in "data chats" (intermittent), as well as administrative meetings (frequent).

In terms of personalized learning connections, participants described a school that focused on personalization (getting to know the students) and provided multiple opportunities for students to become involved in school activities. The assistant principals, counselors, and coaches interviewed estimated that 80 percent to 95 percent of students had a strong connection with at least one adult at the school. Participation was reportedly not, however, evenly distributed across the student body. The students in the higher-track focus group described more involvement than students in the lower-track group. In helping to build connections, adult participants identified a concerted focus on certain groups of high-needs students (low-performing, high-absentee, low-GPA). Students and other participants spoke of high school spirit, although they said that that, too, depended on how involved a student was in school activities.

Some participants described students as cognitively engaged, while others described them as unmotivated, apathetic, or only performing for a grade. Teachers and counselors spoke particularly about low levels of student motivation among the bottom 30 percent of students. There was not a consensus among participants on how many students took responsibility for their learning, with the estimates ranging from 40 percent to 95 percent. Students in one of the focus groups described cheating during tests using multiple methods.

In terms of organization of the learning environment, the guidance office reportedly played a central role. The guidance director sat on the principal's leadership team, had a strong focus on

college readiness (actively worked to protect and expand AP offerings), and coordinated key academic programs (e.g., 9th grade orientation, registration, testing, parent conferences, student services).

B104 used the district-mandated course assignment system to assign students to courses. However, participants at B104 reported that guidance counselors reviewed students' schedules individually before the school year started so they could make their own assessment of student assignment. After the first semester, students who were failing courses could move into lower track courses. In terms of assignment of teachers to courses, administrators and department chairs at B104 drew on teacher requests/preferences, consideration of student needs, teacher and student performance data, school needs, certification, seniority, and suggestions from administrators.

When discussing instructional practices, teachers at B104, as at other schools, were expected to post a daily agenda. Participants in the study did not report extensive use of instructional strategies such as individualized pedagogy, collaboration, or scaffolding. They did, however, report the widespread use of differentiated instruction and questioning strategies to extend students' thinking. A few participants provided concrete examples of questioning strategies aimed at developing critical thinking skills, including Socratic seminars. Participants also described tailoring instruction to student interests. In terms of student behavior, participants described occasional distracting behaviors and the need for more respect; however, no severe problems were reported.

In terms of rigorous and aligned curriculum, participants at B104 reported high curricular alignment to state and district standards, with strict adherence to the district's instructional focus calendar. Participants reported that the instructional focus calendar outlined the content, sequence, and time allotted for instruction for each curricular component for each subject area. Participants reported that the personal learning community was the primary structure in place to support curricular and instructional alignment. Teachers had mixed perspectives on challenges presented by the IFC. Some discussed constraints in instructional flexibility, while others reported "having the flexibility to teach". None mentioned efforts to align the curriculum across departments.

Views also were mixed on curricular rigor. While some participants attested to the rigor of the courses, particularly the AP courses, others reported various threats to rigor. Some teachers reported that the district's and school's efforts to increase AP enrollment increased the rigor for students who would not have traditionally been enrolled in these courses. But others said the push to increase AP enrollment and some inappropriate placement decisions that resulted from the district's student progression matrix negatively impacted the rigor afforded students.

Participants at B104 reported high expectations for faculty and staff, but mixed expectations for students (especially low-performing, low-SES students). The guidance office appeared to be a hub for high-performing, college-bound students, with counselors advocating for more AP offerings and expanding access to AP and honors courses. While there appeared to be a strong emphasis on providing programs to students in the lowest 30th percentile, some participants nevertheless reported concern about their ability as educators to meet the social and academic needs of the lowest-performing students. Several participants also expressed a concern that they were missing the "middle" group of students given the school's focus on top and bottom performers. Nevertheless, B104 provided a CATS program (an AVID-based program), with the support of administrators and teachers, to focus on identifying middle performers and

transitioning them into a college-preparatory track. There was also a well-regarded culinary arts program that served as an option.

Administrators and teachers described mixed levels of parent involvement, with involvement low for the parents of lower-performing, less involved kids. Participants reported various efforts to reach out to parents to create a culture of parent involvement. Teachers were reportedly assigned to call all parents with children in the lowest 30th percentile of FCAT performance. Participants pointed to Student Government as a key way the school reached out to the community; instead of working to bring resources to the school, however, this group worked to serve the external community. The principals reported having partnerships with 50 to 80 organizations or businesses and an assistant principal dedicated to partner outreach.

B104 also had a traditional high school structure, organized around subject matter departments and the tracking of students by ability group. Administrators and teachers also responded to state and district policy through practices such as aligning the curriculum, using the district assignment matrix, and analyzing student data. Like B103, though, administration and faculty shared a common vision around a sound and challenging environment for students that incorporated both their academic and social needs. Administrators and teachers described that clear, coherent, and deliberate structures were in place to provide rigor for all the students as well as having the social supports in place to help students needing special services. At B104, this took the form of resources for different groups of students—AP students, AVID students, and students in the lowest band of the FCAT. However, it still represented a shared vision for all.

Section V: Comparisons between Higher and Lower Value-Added Schools by Component

In this section, we focus on our findings for each separate component. We pay specific attention to how each is manifest at our case study schools. As our interest is on the nature and enactment of each component, we break each down by subcomponents that we either identified in the research or that emerged inductively during our study. Whereas in Section IV we presented a comprehensive portrait of each school, here we focus on each component and discuss the similarities and differences as they were observed between the higher- and lower-VA schools. This approach allows us to identify the specific components, subcomponents and their characteristics that seem to be making a difference between HVA and LVA schools.

We begin here with our findings on Quality Instruction. We do this for two reasons. First, as the higher-VA schools had higher student achievement gains with our target population, we hypothesized that a major factor would be the quality and nature of instruction. Second, undergirding our hypothesis was that this component is most often associated in the research with improved student achievement. Due to the importance of Quality Instruction, we used multiple methodological approaches and analyses to understand the differences in instructional practices and quality at our four case study schools, including the CLASS-S classroom observation instrument, course assignment matrices, student shadowing logs, and interviews with school administrators, department heads, teachers, guidance counselors, and students.

When we report on the other nine components, we draw from the interview data. We present our findings by subcomponent and then follow with the "bundles of practices" that appear to explain differences in the ways schools are able to develop, implement, and sustain the essential components. By including the bundle of practices, we are identifying the specific ways in which the subcomponents were enacted at each school.

Quality Instruction

We begin our discussion of Quality Instruction with our findings on the CLASS-S instrument, which we used to measure teachers' practices and instructional quality.   We then turn to our analysis of the course matrices, the student shadowing logs, and the qualitative findings from our interviews with school administrators, support staff, teachers, and students.

Taken together, our indicators of the quality and nature of instruction across the schools—CLASS-S, course matrices, student shadowing, and interviews with multiple school stakeholders — reveals no major differences in instructional quality across the four schools. We cannot turn to evidence in the area of Quality Instruction to explain the differences in value-added achievement between our high- and low-VA schools.

CLASS-S Analysis

Teachers' Practices and Instructional Quality

This section summarizes the findings of our analysis of English, mathematics, and science teachers' CLASS-S scores. Although the target classrooms were those in which primarily 10th grade students were enrolled, a small number of 9th, 11th, and 12th grade classrooms were observed and included in the analysis. The CLASS-S has been designed to measure middle and

secondary teachers' practices and instructional quality across content areas in four broad domains: (1) Emotional Support, (2) Organizational Support, and (3) Instructional Support. Each domain is organized into multiple dimensions, and each dimension consists of several indicators. An additional dimension, Student Engagement, is reported separately. Below, we describe differences between schools in average scores across domains, providing specific examples for a dimension in each domain. We also indicate where the size of the honors/regular gap differs across schools, which was tested using a multi-level statistical model, adjusting for the clustering of observation segments within teachers.

Both HVA and LVA schools had CLASS-S dimension scores in the middle range of the 7-point scale (Emotional Support ranging from 5.0-5.4; Organizational Support ranging from 4.7 to 5.3; Instructional Support from 3.7 to 4.6, and Student Engagement from 4.6 to 5.2). Contrary to expectations, B104, an HVA school, tended to be on the lower end of these distributions, while B103, the other HVA school, tended to be at the upper end. Across all four schools, advanced/honors courses had higher average scores than regular classes (with differences of about a half a point). Differences by domain are detailed below.

>   *Emotional Support*

The *Emotional Support* domain includes Positive Climate, Negative Climate, Teacher Sensitivity, and Regard for Adolescent Perspective. In general, higher VA-schools did not receive higher ratings for emotional support than low VA schools, although there were some differences in the size of the honors versus regular gap across schools. Specifically, there were no statistically significant differences across the four schools (Model 1, chi sq=4.23, p=.237) in a multilevel model predicting emotional support, controlling for track, grade level, subject, and time of year of the observation, although the average gap between honors and regular classes was narrower on the Emotional Support domain in B103 (HVA) than B101 (LVA) (Model 2, B=.86, p=.005) when an interaction between track and school is added (suggesting that Emotional Support in regular classes is particularly problematic in B101).

Differences in the *Positive Climate* domain are illustrative of these overall differences. For example, while there are no statistically significant differences across the four schools in average positive climate (Model 1, chi sq=5.21, p=.157), adding an interaction term between school and track shows that B101 has the lowest average Positive Climate score in regular classes and the largest gap between its regular and honors classes (compared to B103 and B104). These differences are all less than a point on the CLASS-S scoring rubric (SD=.92), suggesting that while there is measurable variability, all four schools have mid-level Positive Climate in both honors and regular classes. An example of a classroom behavior that would result in a mid-level score on positive climate might be "the teacher and some students appear generally supportive and interested in one another, but these interactions are muted or not representative of the majority of students in the class."[6] Scores across the schools on the domain *Regard for Adolescent Perspectives* were similar, with scores in the mid-range and no statistically significant differences among the four schools for regular classes, but with a wider gap between honors and regular in B101 compared to B103. An example of a mid-range score with regard to adolescent perspectives might be "material is sometimes connected to the current experiences of adolescents and sometimes makes salient how or why the material is of value to students."

Figure 1: Predicted Emotional Support Score, by School and Track

Predicted Emotional Support Score, by School and Track
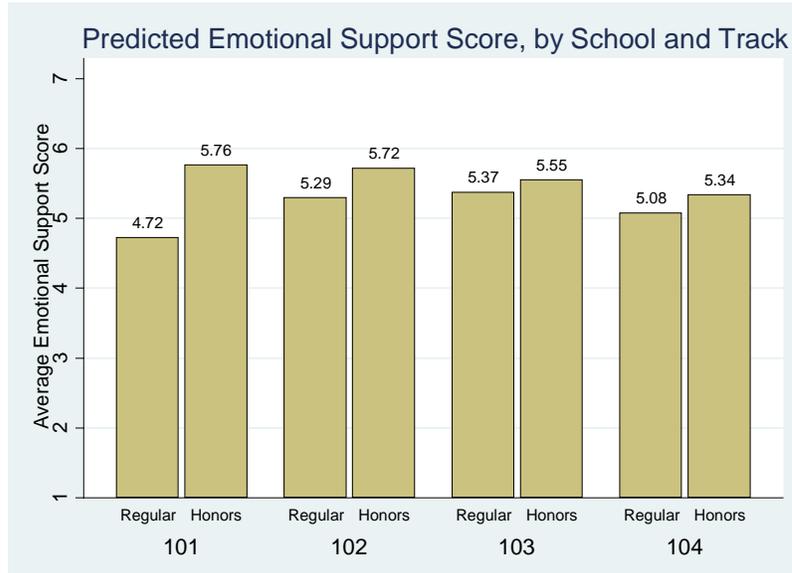
Classroom Organization

The *Classroom Organization* domain includes Behavior Management, Productivity, and Instructional Learning Formats. While the two HVA schools did not show systematically better Classroom Organization scores than the LVA schools, B103 (HVA) had a higher average Classroom Organization Score than B104—the other HVA (Model 1, B= -.593, p= 0.042) — controlling for track, grade level, subject, and time of year of the observation. As was the case with Emotional Support, the average gap between honors and regular classes was narrower on the Classroom Organization domain in B103 (HVA) than B101 (LVA) (Model 2, B=.56, p=.042). Classroom organization in the mid-range might reflect observations where "most of the time there are tasks for students, but learning time is sometimes limited by disruption and/or inefficient completion of management tasks."

Figure 2: Predicted Classroom Organization Score by School

Predicted Classroom Organization Score by school

	101		102		103		104	
	Regular	Honors	Regular	Honors	Regular	Honors	Regular	Honors
	4.71	5.57	4.97	5.21	5.33	5.62	4.74	5.10
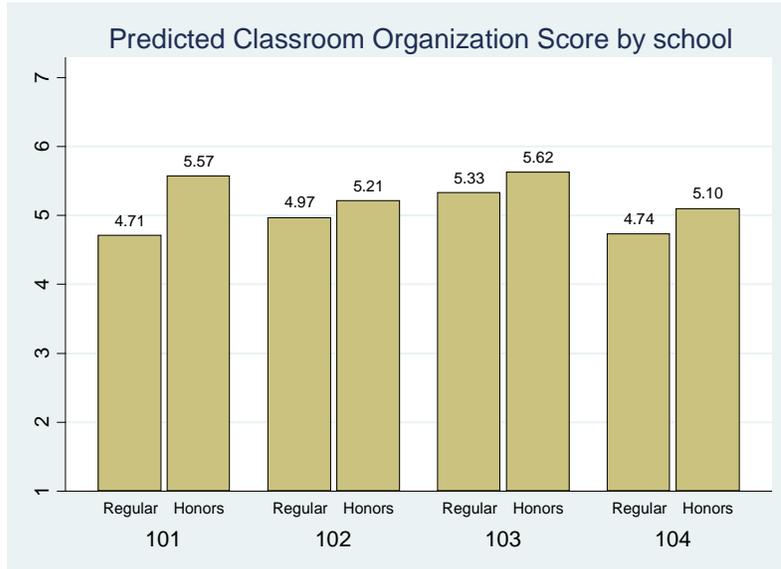
Instructional Support

The *Instructional Support* domain consists of Content Understanding, Analysis and Problem Solving, and Quality of Feedback. As with Organizational support, the widest gaps were between two HVA schools, B103 and B104 (B=.85, p=.001). This gap in scores between the two HVA schools held for each of the domains of Content Understanding (Model 1, B= -.7603, p= 0.005), Analysis and Problem Solving (Model 1, B= -1.23, p<.0001), and Quality of Feedback (Model 1, B= -.597, p=,038). A mid-level score on content understanding could be reflective of cases where "class discussion and materials communicate a few of the essential attributes of concepts/procedures but examples are limited in scope or not consistently provided." A classroom scoring in the mid-range on analysis and problem solving might reflect observations where "students occasionally engage in higher-order thinking through inquiry and analysis, but these episodes are brief or limited in depth."

Figure 3: Predicted Instructional Support Score

Predicted Instructional Support Score
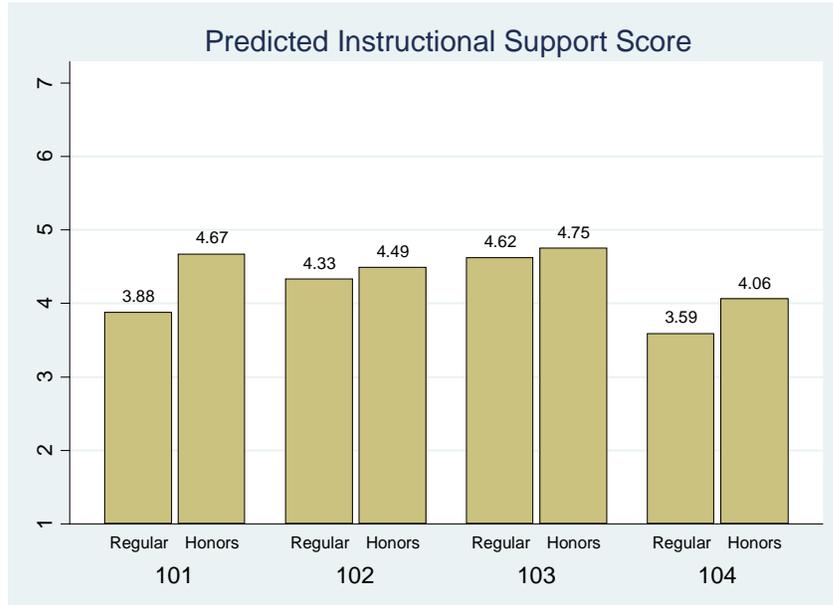
Student Engagement

Finally, in the area of *Student Engagement*, B104 (HVA), again, had the lowest score for regular classes (difference between B104 and B103= .77, p=.014: Model2), controlling for grade, subject, and time of year of the observation. The gaps in between honors and regular were wider in B101 (B= .806, p=.014) and B104 (B=.546, p=.069), than in B103 (.198, p=3.54).

Figure 4: Predicted Student Engagement Score

Predicted Student Engagement Score
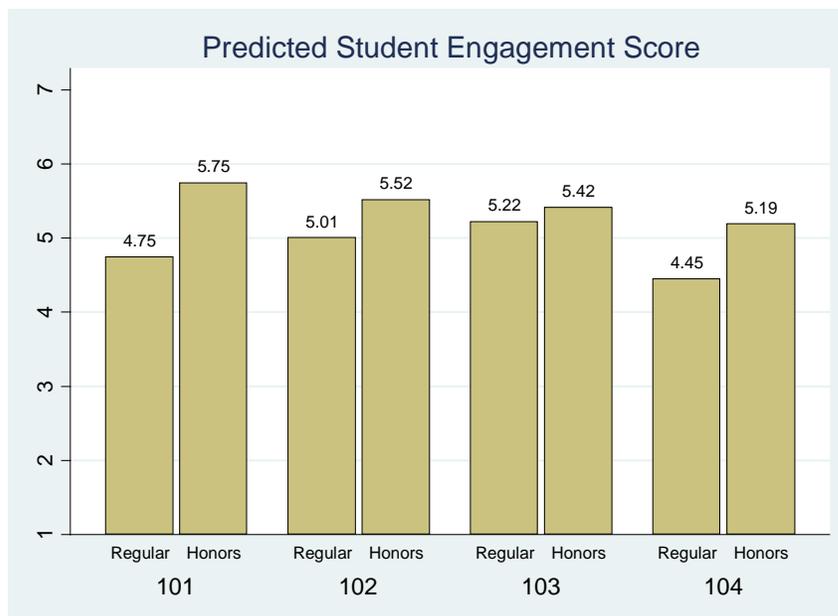
In summary, rather than there being a clear distinction across the dimensions of instructional quality between HVA and LVA schools, school-level averages across all four schools tended to be in the middle to low-middle range (around 3 or 4 on the 1-7 point scales) with the largest gaps tending to be between schools 103 and 104 — the two HVA schools. Students enrolled in advanced courses were also more likely to receive higher quality instruction across all of the categories, with the gap often widest at B101 and narrowest at B103, emphasizing the importance of examining the distribution of students enrolled in honors and regular class across the four schools.

These findings do not provide evidence for the difference between the higher- and-lower VA schools. However, in a number of domains, they do provide evidence regarding the differences between higher- and lower-tracked courses, thus highlighting within-school variation in teachers' instructional practices and instructional quality.

Student Course-Taking

At this juncture in the study, we do not have access to students' course-taking patterns. We do, however, have each school's master schedules. Based on this data, we conducted an analysis of courses and course counts for each schools. Figure 5 shows the proportion of courses offered in core subjects that are classified as advanced (including honors, gifted, dual enrollment, and Advanced Placement). Courses and counts were obtained through analysis of the four case study schools' master schedules. The high value-added (HVA) schools have a higher ratio of advanced courses than the low value-added schools (LVA), particularly in the areas of math and science. School 103, a HVA school, offers the largest proportion of honors courses in math, science, and social studies. Although School 102, an LVA school, offers the smallest proportion of courses at the advanced level, 101, the other LVA school, has a ratio of advanced courses that rivals that of School 104, an HVA school, in both social studies and Language Arts (56 percent to 57 percent and 63 percent to 62 percent, respectively) and to HVA School103 in Language Arts (63 percent to 63 percent). Distributions across course levels by school were similar for courses that were predominantly taken by 10th graders.

This distribution of course offerings complements the CLASS-S scores — HVA School 103 had a greater proportion of students in AP and honors courses, while HVA School 104 had generally similar proportions of students in AP or honors courses as the two LVA schools

Figure 5: Proportion of courses offered that are honors or Advanced Placement, by school and subject

Proportion of courses offered that are honors or advanced placement, by school and subject

Legend: English/Language Arts, Math, Science, Social studies
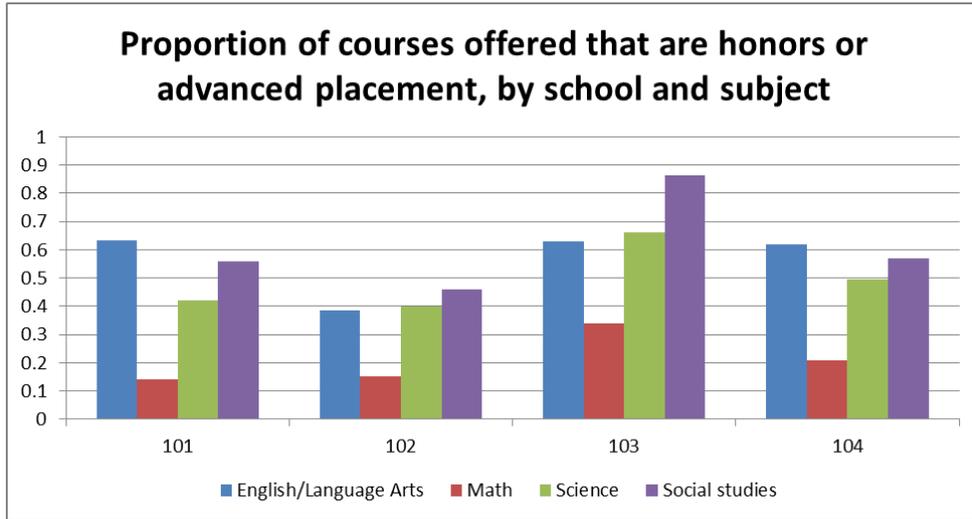
Student Shadowing

Our analysis of the BCPS Shadowing data finds that students in higher-VA schools were more often observed to be engaged in the task the teacher set for them than students in lower-VA schools. However, this difference is small and appears to be driven by relatively lower engagement in School B101.

We found no differences between higher- and lower-VA schools in amount of time students had been given a task or specific assignment to do, although students in schools B102 and B103 were observed slightly less often to have a task.

We found four small differences between higher- and lower-VA schools in terms of class time activities. Students in higher-VA schools were more often participating in transition/waiting activities (and this was statistically significant), testing, and individual work, but less often in socializing than their peers in lower-VA schools. The increased time in waiting/transition was observed in both higher-VA schools (B103 and B104), as was the decrease in time spent socializing. The additional time students in higher VA schools spent engaging in individual student work, such as silent reading, writing, or working individually on practice problems, was driven by School B101, where students were observed in only 8 percent of class time doing individual work. The additional time students in higher-VA schools engaged in testing is driven by School B103.
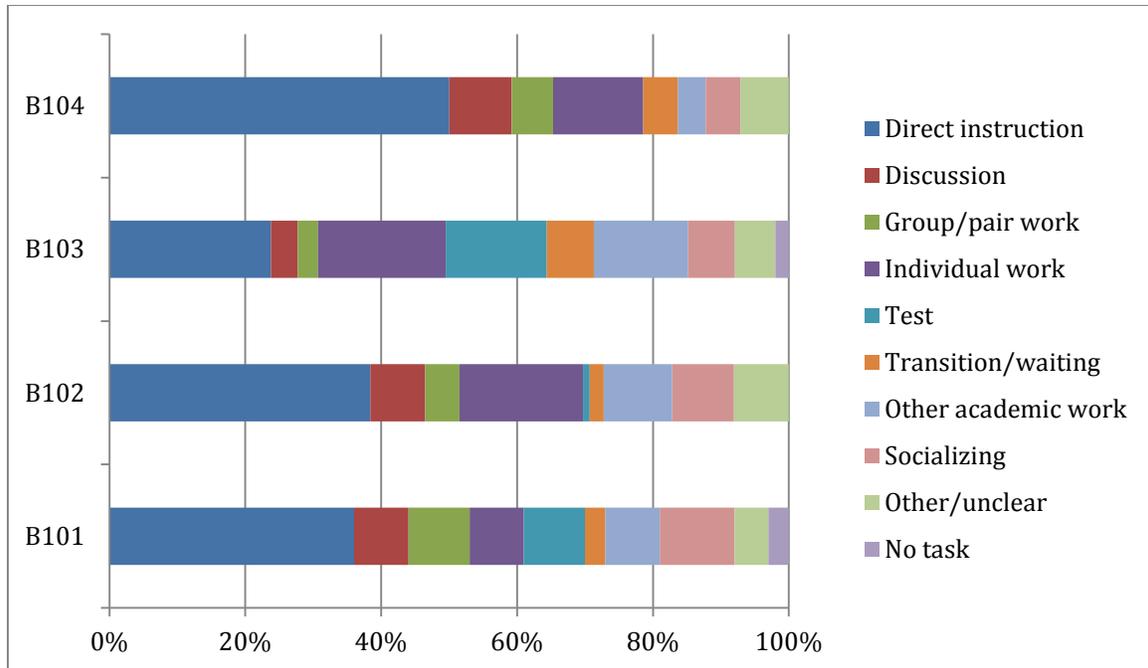
Figure 1-Percentage of Class Time Students Spent in Various Activities

Not surprisingly, students spent most of their time during class interacting with teachers. In 45 percent of the observation segments during class time, students were observed interacting with their teacher. In 22 percent of observation segments, students were not interacting with anyone, with higher-VA students being observed only slightly more often not interacting with anyone. However, this small difference masks greater variation between schools regardless of VA status. For example, students in B103 interacted with no one for 30 percent of class time, which was slightly higher than in B101, where students sat independently for 25 percent of the time. Students in both B102 and B104 spent less time alone than in the other two schools, as they spent only 16 percent and 17 percent of class time not interacting with anybody. In 18 percent of the observation segments during class time, the target student was interacting with other students. Students in higher-VA schools were observed less often interacting with other students, particularly in School B103.

Overall, there was considerable variation between individual schools in both activities in which students were engaged and with whom they interacted during class time. While these patterns point to few consistent differences between higher- and lower-VA schools, they do paint a picture of how high school students spend their day. Across all schools, students spend a considerable amount of time listening to their teacher provide direct instruction. The main difference between higher- and lower-VA schools is that students in higher-VA spent more time engaged in a task during class time.
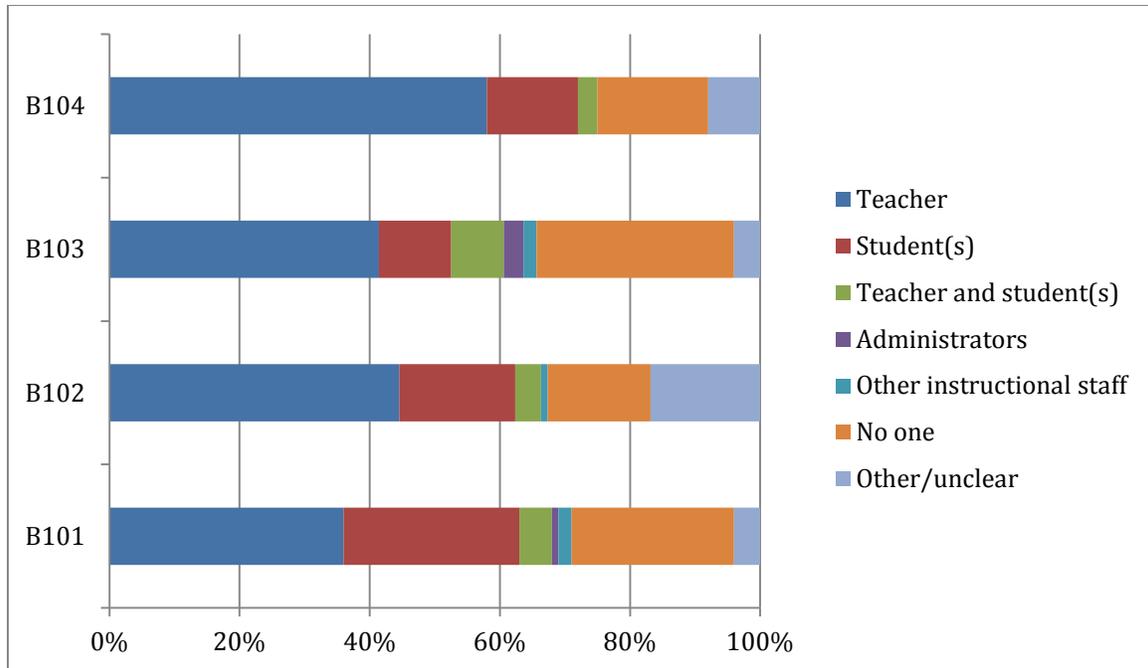
Figure 2-Percentage of Class Time Students Spent Interacting With Various People

Variation in schooling experiences during class time across tracks

We attempted to sample the students for shadowing based on track (i.e., half the students were selected among honors/advanced track students and half were chosen among regular/remedial track students). In practice, this was not achieved in Schools B102 and B104. To understand the variation in student experiences during class time across tracks, this analysis compares student experiences across tracks within the same schools, using only data from schools B101 and B103.

First, there are some areas in which differences in time use favor students in lower-track classes across schools B101 and B103. For example, when students had a task in which to engage, low-track students in both schools were more often observed engaging in that task (i.e., they were on task) than their high-track peers (this difference is statistically significant). During class time, low-track students in both schools were also more often observed to be participating in class discussions than their peers in high-track courses. Conversely, high-track students were more often observed in a transition/waiting time during class in both higher- and lower-VAM schools, although this track difference is small.

There are a number of areas in which track differences were found in School B101 but not in B103. High-track students in B101 were more often observed to be in class than low-track students, although there was no difference between tracks in School B103. This difference is consistent with the hypothesis that higher-VA schools compress variation between tracks. However, during class time, high-track students were observed more often to be socializing and interacting with other students than their low-track peers in School B101. There was also a small difference between tracks in School B103, but the difference was not statistically significant. So while high-track students were observed more often during class time than low-track students in School B101, they spent that time in nonacademic activities, suggesting they did not necessarily benefit from that added time. On the other hand, low-track students in School B101 were also

more likely to be interacting with the teacher during class time than their high-track peers, although there was no track difference in School B103.

There were also some differences between tracks that were evident in School B103 (higher-VA), but not in School B101 (lower-VA). High-track students in School B103 were observed more often interacting with administrators, compared to their low-track peers. However, they were also observed more often than their low track peers to have no task on which to engage during class time.

Finally, there are areas in which track differences exist in both schools, but the difference does not always favor one track consistently. In School B101, low-track students were more often observed interacting with other instructional staff (e.g., specialist), but high-track students were observed interacting with other instructional staff more often in School B103 (this interaction is statistically significant). Likewise, in School B101, low-track students were more often observed taking a test, but high-track students were observed taking a test more often in School B103. Conversely, high-track students in School B101 were more often observed doing both group work and individual work, but in School B103, low-track students were more likely to be observed in these activities.

While we hypothesized that HVA schools would provide higher quality instruction than LVA schools, this was not the pattern we found. While School 103 (HVA) often had among the higher average scores across CLASS-S dimensions, the other HVA school, 104, tended to have among the lowest scores across the CLASS-S dimensions. Thus, we look to the interview data (which were coded without knowing the outcomes on the CLASS-S) to try and understand why instructional quality did not vary markedly between the high- and low-VA schools, as well as why the instructional quality in School 104 was lower than the other three schools. We were also interested in why the largest gap between advanced and regular courses in instructional quality was in B101 while the gaps for B102, the other LVA school, were not measurably different from HVA schools in most cases.

These data on teachers' instructional practices came from the following questions/themes: (1) Are there specific instructional practices encouraged by your school?; (2) What are the major challenges for improving student learning?; (3) What are you doing to address these challenges?; and (4) What are you doing to improve the quality of your instruction in your classroom? The following themes were the most salient across teachers and other school participants in the interviews:

Emotional Support

Although teachers in both HVA and LVA schools mentioned the importance of providing emotional support, there was more talk of specific strategies for support in the HVA schools. Specifically, the discussions of teachers in HVA schools converged around four areas of emotional support (real world connections, a culture of respect, building relationships with students, and collaboration) while there is no such convergence in LVA schools. Further, among the teachers in LVA schools who brought up specific themes related to emotional support, a number discussed specific challenges in providing the sort of emotional support that the CLASS-S coding framework rewards. For example, one teacher in an LVA school mentioned that the school does not want teacher-centered instruction, but it is at times appropriate because students lack necessary background knowledge. Another teacher commented that the school encourages group work, but it is difficult to implement because of the low academic level of some students; group work is much easier with honors students. A third teacher echoed this sentiment, noting

41

that though the school encourages group work, it is difficult to implement. In high value-added schools, such difficulties were not evident. However, at school 104 (HVA, lower CLASS-S scores), a number of teachers discussed the importance of building respectful relationships with their students, but remarked that building respectful relationships is difficult.

Behavior Management

The challenges across LVA and HVA schools described by teachers are similar: student misbehavior, distractions, and lack of respect. Participants in LVA schools, however, described problems that were more severe, including cheating on homework that had become so widespread that was accepted as the norm. Participants at HVA schools described problems as less serious and discussed addressing behavior issues proactively, instructing students about the expectations for behavior. We also found some evidence across the teacher interviews that student misbehavior broke norms of high expectations in the HVA schools, while poor behavior had come to be expected in the LVAs. The story is similar regarding how teachers described their students' motivation. Multiple teachers in all schools mention lack of student motivation as their primary challenge in improving their instruction. Among teachers in LVA schools that mentioned student motivation, however, few provided any detail regarding how they tackled this challenge. In high value-added schools, teachers that mentioned student motivation as a challenge also tended to provide specific examples or strategies for addressing students' lack of motivation and engaging them in instruction, although this was reported more in B103 than in B104.

Adapt lesson or curriculum to students' needs

The theme of adapting the lesson to students' needs also emerged in the teacher interview data. In the LVA schools, several teachers described how they sought to improve the quality of their instruction by researching different models on the Internet, adapting what they are doing to the students' proficiency, and by responding to the different modalities and strategies that students use. The challenges of adapting instruction to students were described as ever-shifting and more challenging because the students are not proficient. By contrast in HVA schools, more teachers (six, as compared to two in the LVA schools) described adapting their lessons and instruction to student learning needs by observing and collaborating with other teachers and staying abreast of the latest instructional strategies. More teachers in HVA schools reported striving for excellence, for the sake of improving the quality of instruction. A variety of modalities, strategies, and materials aimed at engaging students' interests were evident in the data from HVA schools. Similarly, when teachers in LVA schools discussed differentiating instruction, they just mentioned that the school encourages it, without providing any detail or examples of how they actually practiced differentiation in their classrooms. In contrast, when teachers in the HVA schools discussed differentiating instruction, they also mentioned that it is encouraged practice and often a challenge, but they were also more likely to provide examples and strategies of how they put differentiation to work in their classrooms.

Making vocabulary visible

All seven mentions of word walls (a district initiative) came from HVA schools and all ten mentions of school-wide use of the "word of the day" came from B103. While vocabulary development was evident at all four schools, B103 took an active rather than passive approach. This reflected broader evidence across all of the interviews conducted, suggesting that B103 had more instructional routines in place. While teachers at all schools reported that they are required to have an agenda and/or learning objectives posted in the classroom, teachers at B103

consistently reported the existence of school-level expectations for implementation of additional routines as a regular part of instructional practice (word of the day, silent reading program, "Do-Nows"). There was also evidence that these routines were instituted and supported long term by the leadership at B103 — consistent reports across those interviewed that the principal cared strongly about bell-to-bell instruction (i.e., providing student with instructional activities throughout the entire class period) and other productivity-maximizing expected routines (e.g., ensuring that students have an opening activity to complete in the first five to ten minutes of class). They also indicated that he followed up on whether teachers were implementing expected routines.

Emphasis on higher-order thinking skills

In LVA schools, rigor was espoused as a means to high-quality instruction, although there was little evidence in the interviews regarding whether or how this was enacted. Consistent with the slightly higher scores on the analysis and problem-solving domain of the CLASS-S, the majority of concrete examples of teaching higher order thinking skills came exclusively from teachers in B103, including descriptions of using open-ended questions and Socratic methods. This suggests that students at B103 were carrying a greater amount of the cognitive load. Similarly, while teachers across all four schools mentioned the value of student collaboration in class, we found evidence that this practice was encouraged across all classes in B103, in honors and advanced classes in 104, that it received little mention in B101, and elicited negative responses in B102.

In sum, the teacher interview data revealed differences between HVA and LVA schools in key indicators of quality of instruction, namely emotional support, behavior management, instructional routines, and strategies for differentiating instruction. Teachers at HVA schools evidenced four areas of emotional support (e.g., real world connections, a culture of respect, building relationships with students, and collaboration) while at LVA schools there was no such convergence of evidence. Behavior management differed as well; student misbehavior broke norms of high expectations in the HVA schools, while teachers had come to expect poor behavior in the LVAs. Teachers' descriptions of students' motivation paralleled the differences in emotional support and behavior management. Teachers reported that students were more highly motivated in HVA schools than in LVA ones. Finally, teachers in HVA schools described differentiating instruction as a challenging practice, but one that was encouraged. They provided concrete examples of – and strategies for – differentiating instruction. Such evidence was absent in interviews with teachers at LVA schools.

Learning Centered Leadership

Leadership Sets and Implements Vision for All Stakeholders

Across these schools few if any substantive differences emerged in the clarity of the schools' visions for staff and students. In all four schools, staff and faculty identified a range of general goals that they thought the principal or the school as a whole was shooting for — very few of the respondents in the schools referred to a specific mission statement, vision, or related goals. Only in B103 was there greater agreement about the school's motto, but even at B103 teachers identified a number of differing goals or priorities.

Leadership Supports the Development of Quality Instruction

Across all four schools, administrators reported engaging in more regular and in-depth observations and follow-up meetings than the interviewed teachers reported. In all four schools, the administration rolled out common teaching strategies for teachers to use: word walls, common board configurations, and/or bell-to-bell instruction. Administration and faculty both reported that administrators focused on these strategies, but it was unclear whether administrators looked at other classroom characteristics in their observations. There appeared to be some difference between high and low value-added school administrators' engagement in actual practices to support improved instruction. In B101, some faculty commented that administrators provided feedback to teachers primarily as various issues arose, and in B102 multiple teachers criticized administrators for providing little or no feedback. These findings contrasted with higher value-added schools, where administrators appeared to be more proactive. In B103 teachers described receiving formal and informal feedback on their teaching from both administrators and department chairs through regular meetings. In B104 administrators provided some evidence that they were looking more closely at classroom instruction for factors beyond the common teaching strategies above. They also described having quarterly "one-on-one" data chats with teachers to review both student performance data and observation data. B104 administrators also provided some evidence that they were following up on observations not only with feedback to teachers but also through concrete steps such as asking instructional coaches or department heads (DHs) to assist teachers. In B102 the atmosphere was highly divided between administrators and many teachers, something that seemed to hinder the effectiveness of administrators' efforts to help improve instruction.

Leadership Supports the Development of Rigorous and Aligned Curriculum

Across three of these schools there appeared to be deliberate efforts by administrators and other leaders to structure meetings to align the curriculum. These included frequent checks by administrators on IFC implementation in B101, the discussion of curriculum coverage in small learning communities in B103, and the PLC meetings at B104. Only in B102 did leaders provide little discussion of their efforts to support curriculum alignment. In B103 there appeared to be a more conscientious effort to look for evidence of curriculum coverage in walk-throughs, but few details were given as to how administrators did that.

Leadership Promotes Personalized Learning Connections with Students

At schools B103 and B104 there appeared to be more systematic efforts by the administration to support personalized learning connections. These came in the form of looping in B103 and, in B104, a middle school program to reach feeder students before they came to high school. In B101 and B102 it was less clear how much administrators had focused on organizational efforts/initiatives to support building personalized connections. More of their comments about personalized learning connections described their own or others' individual efforts to be "out and about" to talk with students and/or be visible in the halls (these examples came from B101).

Leadership Promotes Ongoing Analysis and Review of School Level Data

It was difficult to determine if there were differences between the schools in the way the administration and other leaders analyzed data. Any differences in the frequency with which administrators met with teachers to review data were also difficult to determine, as administrators and faculty varied in estimates for when these meetings actually occurred. B103 differed in that both leaders and teachers offered specific examples of connections between data and teachers' practices (e.g. changes to IFC or targeting changes in specific activities such as "Do-Nows" based

on data chats). There appeared to be less skepticism about the use of data at B103 and B104 on the part of teachers, though it was difficult to tell how widespread these attitudes are or what was responsible for these differences.

Leadership Garners and Allocates Resources to Support Student Learning

There was not a significant difference between higher- and lower-VA schools regarding administrators' efforts to garner resources through external partners. Participants at all schools reported different leaders running partnership programs, but it was difficult to determine just how much time and effort were devoted to this task. For example, faculty at B101 mentioned having a specific program aimed at building a relationship with external partners and described that one assistant administrator focused some time on this. The principal at B103 offered few specifics of obtaining resources beyond one large private donation and he conceded that he needed to spend more time developing external relationships.

Leadership Promotes the Development of Teachers' Instructional Expertise

Across all four schools there appeared to be a significant amount of responsibility given to teachers for choosing their professional development, whether it be sessions/training outside of school or participation in professional or small learning communities on site. Leaders maintained some control, but in different ways. In B101 and B102, principals described a mixture of control, providing some training to their staffs or requiring specific groups to attend particular trainings while allowing other teachers to choose. In B103 and B104, leaders appeared to provide direction to their faculty for collaboration strategies (in such meetings as PLCs in B104) by offering five-year (B103) or one-year (B104) plans that helped to guide their activities throughout the year (although these plans related more to ongoing collaboration than to professional development). Evidence in B103 and B104 came from isolated teacher descriptions of the plans to guide collaboration — it was difficult to corroborate this in others' accounts.

Bundles of Policies, Programs, and Practices

Leaders in the higher-VA schools initiated and supported structures that facilitated the development of personalized learning connections with students – namely small learning communities and looping in B103 and middle school articulation in B104. There was evidence that leaders used data in in the higher VA schools to guide instructional decisions. For example in B103, administrators held data meetings to review new data throughout the year. In B104, the administration developed its own school data system and reported meeting one-on-one with specific teachers to discuss data. There was also evidence (albeit limited) of leaders in B103 and B104 using the school structures/organizations and plans/strategies more frequently to guide activities such as their faculties' ongoing collaboration.

Organization of the Learning Environment

Assignment of Leadership Team

Participants at all four schools described similar organization of administrative tasks. At all schools, assistant principals oversaw a grade level and were assigned oversight over specific departments and activities. Schools differed in the organization of their leadership teams, however. B101and B102 had an administrative team, composed of the principal and assistant

principals, that met weekly and a Leadership Team that met biweekly. This latter group generally included the principal, assistant principals, department chairs, ESE specialists, and the reading coaches, although the composition differed slightly at each school. At B103, the leadership team comprising the principal, assistant principals, the office manager, the reading coach, as well as aspiring administrators, met weekly. At B104, in contrast, participation was broader — department heads, team leaders and instructional coaches – were included in their weekly meeting.

Assignment of Students to Classes

During the 2010-2011 school year, all of the schools had implemented the district's new computerized system that assigned students to course levels based on their test scores. Participants at the higher-VA schools, however, welcomed the practice of exposing student to more rigor, whereas participants at the lower-VA schools were more skeptical about the practice. The higher-VA schools also had stricter structures in place regarding students changing courses. For example, at B103 administrators prohibited students from changing courses once the year had started. At B102, however, administrators were still moving students into lower courses in November.

Teacher Assignment to Courses

Across schools, participants identified several factors that were considered when teachers were assigned to courses. These factors included certification, teacher requests/preferences, consideration of student needs, teacher performance and student performance data, school needs, and looping (at B103). Some factors seemed more important for some schools than for others.

At B101, B102, and B104, administrators and department heads considered teacher preferences in the assignment process. Participants at B103 barely mentioned teacher requests or preferences. On the other hand, "the needs of students" appeared to be of greater concern for B103. Similarly, some participants at B103 seem to view the practice of "looping" students as influencing how teachers are assigned. B101's participants seem to think that both teacher preferences and concern for students' needs weighed equally in the decision-making process. Half of the participants at B104 reported that teacher preference was considered highly.

Assignment of Support Personnel

Schools B101, B102, and B103 had four guidance counselors, and School B104 had five. The process of assigning students to guidance counselors varied across schools. B101 did not loop with the guidance counselors; students in B102 looped with their guidance counselors in $10^{th,}$ 11th and 12th grade; B103 looped with guidance counselors and assistant principals; and B104 did not loop. B104 was the only school in which the guidance counselors visited every classroom in every grade. There appeared to be a difference in how the support personnel approached their responsibilities and the thoroughness with which they performed their duties. At the lower-VA schools, there appeared to be a focus on what could not be done and the overload of student caseloads. At B103 and B104 the structures in place appeared to facilitate personalized and comprehensive services to all students.

Bundles of Policies, Programs, and Practices

The higher-performing schools tended to include more people at their weekly administrative meetings. In their student assignment practices, they enforced the district policy that placed students in challenging courses by making it difficult for them to move to a lower-track course

after the semester had begun. In terms of teacher assignment, we did not identify any specific bundle of practices exclusive to the higher-performing schools. For example, all schools considered teacher requests/preferences, student needs, teacher and student performance data, and school needs in assignment. In terms of assignment of support personnel, we found that at only one school, B103, which is higher-VA, did guidance counselors loop with students in each grade level (9th-12th).

Culture of Learning and Professional Behavior

Collaboration among Adults

There appeared to be differences between the two higher- and two lower-VA high schools in terms of the focus and frequency of collaborative activities. Administrators and teachers across all four schools reported that collaboration took place within departments. Collaborations *across* departments occurred more informally and less frequently in B101, B102, and B104. They were formalized in B103 through SLCs (organized by grade level) in 9th and 10th grade, in which the assistant principals and teachers of the lowest-performing students met regularly to discuss student progress.   Additionally, B103 participants reported that administrators, counselors, and some teachers were engaged in looping structures allowing them to follow cohorts of students through multiple years. Administrators and teachers in B104 reported that there were frequent collaborations with feeder middle schools regarding incoming student cohorts.

Culture of Learning among Adults

There appeared to be differences between the two higher- and two lower-VA high schools in terms of a positive climate and, for B103, a sense of efficacy and high expectations for adults. Across all four schools, administrators, teachers, and other school staff reported collegial relationships among the instructional faculty, and generally between the faculty and administration. In B102, however, the relationship between faculty and administration was reported as being dysfunctional. In B103, participants reported a shared focus/vision throughout the school oriented around high expectations (academic and behavioral) for performance, both for adults and students.

Culture of Learning among Students

There was a higher degree of academic focus among the student body reported at B103 than at the other three schools. This appeared to be the result of strong supports for a student culture of learning for all, a culture of high expectations, and the school's choice component. B104 reported that many of the same supports were present, however, instead of a common culture of learning for all students, but supports were specifically targeted and tailored to students in different performance groups.

Ongoing Professional Development

There were no consistent differences to report between the two higher- and the two lower-VA high schools with regard to professional development. On the whole, administrators and teachers across all four schools reported that formal PD was largely individualized, although there was some evidence of more structured, school-wide professional development focused on reading strategies at B102.

Support for a Culture of Learning

Participants across all four schools reported structures in place to support a culture of learning, but the successful implementation varied by school. Teachers in B103 reported that SLCs, for example, were well resourced (with allocated common planning and physical proximity of teachers) and "pushed" by the administration. Teachers in B104 reported that instructional coaches within the school had been tapped and provided with the authority to act as change agents, implementing support structures (PLCs, targeted classroom visits) with the full support (if not resources like common planning) of the administration. Across schools, resource constraints were reported as obstacles to building cultures of learning, with the physical plant being of significant concern at B102 and B103.

Bundles of Policies, Programs, and Practices

Educators in HVA schools had structures that support a culture of learning, though the structures themselves took different forms. At B103, administrators, counselors, and some teachers were engaged in looping, in which they followed cohorts of students through multiple years, and teachers in the 9th and 10th grades came together in small learning communities to discuss individual student needs. In B104, professional learning communities (PLCs) were instructionally focused and met according to course "preps." Administrators and department heads met with their counterparts in feeder middle schools regarding incoming student cohorts and curricular needs and had administrations that dedicated resources/personnel (despite increasingly scarce resources) to support active implementation of student support structures. Both higher-VA schools had structures to facilitate communication among faculty members. All teachers at B103 were in SLCs and shared common planning, planning space, and physical proximity. B104 had instructional coaching teams with authority to act as change agents. B103 communicated a consistent message of high expectations through daily announcements, posters, a culture reflecting the school's motto, the expectation that all students would take at least one accelerated course. B104, similarly set high expectations through targeted supports to students based on their performance, student government, and the leadership course, as well as robust AP offerings for higher-performing kids, AVID/CATS for middle-performing kids, and FCAT Camps and Pull-outs for lower performers.

Systemic Performance Accountability

Adults: Regular Oversight

Systems of oversight in BCPS consist of some combination of Classroom Walk-Through (CWT) observations and reviews of student achievement data. Participants in all schools reported that the administration conducted classroom walkthroughs; there was some evidence that the use, purposes, and quality of feedback derived from these observations varied among schools. Administrators at B101 reported conducting frequent CWT observations as the backbone of their accountability system while also conducting the most frequent data chats. In B102, a review of teachers' grade distributions received more attention than elsewhere. The principal at B102 also made teachers' students' FCAT scores public to the entire school. The principal at B103 was notable for an emphasis on expectations regarding teachers' professional behavior and would actively remind teachers if they missed a meeting or failed to act professionally. Finally, the principal in B104 paid attention to AP, SAT, and ACT scores among high-achieving students. This was notable because of teachers' concerns in the low-performing schools that their schools' accountability systems focused on low-achieving students and ignored more successful ones.

Adults: Feedback for Improvement

In both of the lower-VA schools, teachers did not receive regular feedback from Classroom Walk-Through observations and teachers were frustrated by the lack of useful feedback. This was especially notable in B101, where despite the regularity of data chats, teachers did not feel that they received useful feedback. In the other schools, feedback was more explicitly on an "as-needed" basis, targeted at those teachers identified by the administration as weak. Teachers were more likely to interpret an absence of feedback as an indication of administrative approval and instructional freedom.

Adults: Rewards and Consequences

Teachers in the lower-VA schools had a more oppositional view toward accountability consequences than teachers in high-performing schools. In B102, this opposition focused on the administration and especially the principal's practice of posting teachers' classroom-level pass rates which teachers viewed as an attempt to embarrass them. In B101, teachers' opposition and skepticism were directed beyond the school-level administration to consequences (such as reassignment) enacted by the state and district. Teachers in the higher-performing schools also tended to look past their own administrations to question the logic of state- and district-implemented consequences for poor performance, though this conversation was fairly academic as the threat was less imminent to them due to their higher school grades. More notable, however, was that principals of both of the higher-performing schools emphasized expectations of professional and instructional behavior in addition to — if not more than — expectations of student achievement.

Bundles of Policies, Procedures, and Practices

At the higher-VA schools in our study, teachers reported receiving regular feedback from Classroom Walk-Throughs whereas teachers in the lower-VA schools reported less consistent feedback. In the higher-VA schools, administrators were more likely to engage teachers in either corrective or supportive feedback in response to classroom observations. Principals in both of the higher-VA schools emphasized expectations of professional behavior in addition to — if not more than — expectations of student achievement.

Personalized Learning Connections

Participants at the four schools reported that there were multiple opportunities for students to become involved, especially in school extracurricular activities; however, participation was not evenly distributed across student bodies. Participants at the higher-VA schools reported broader involvement in student government and sponsored programs than at the lower-VA schools. Student discipline, motivation, and attendance were identified as challenges for all the schools. However, participants at B103 and B104 identified specific social structures and described a prevailing ethos that worked to address these problems. At B101 and B102, participants described efforts to address these issues. However, B102 participants did not identify specific structures to support the teachers' effort. At B102, teachers reported that the administration did not "back them up" with discipline.

Emotional Engagement

Participants generally reported marked differences in emotional engagement between the higher and lower VA schools. At the higher VA schools, participants described a high level of "school spirit,, particularly among students who were involved in extracurricular activities. Students and teachers at B101 reported that the students lacked "school pride." At B102, the "sense of pride" tended to differ between high-performing students and their low-performing peers. Participants reported differences in regards to the levels of expressed satisfaction/ dissatisfaction with school personnel and the overall school experience. When asked whether they would recommend their school to other students, students at B103 were in total agreement. By contrast, their peers at B101 and B104 had mixed feelings; students at B102 gave unanimous disapproval.

Cognitive Engagement

Participants across all schools identified within-school variation in students' cognitive engagement. The principals at both B103 and B104 reported looking for students' cognitive engagement during their classroom observations. Department heads at B101 and assistant principals at B102 reported that a majority of the students did not take responsibility for their own learning, whereas at B103 and B104 participants reported that a majority of students did.

Positive Connections Exist on a School-wide Level

Participants in the higher-VA schools described positive school-wide connections between adults and students, whereas the lower-VA schools did not. Both higher-VA schools had formal structures in place to promote these connections, including strong relationships with assistant principals and guidance counselors. Participants in the higher-VA schools also identified strong disciplinary systems that promoted a sense of caring and, implicitly, trust.

Development of Positive Connections between School Personnel and Individual Students

The higher-VA schools had formal structures in place to support strong adult-student relationships where the lower-VA schools did not. At both of the higher-VA schools, the assistant principals and the guidance counselors described structures facilitating regular interactions with students. B103's looping structure assigned students to the same assistant principal and guidance counselor for the students' four years at the school. Assistant principals and guidance counselors at B104 described strong connections between their two offices to promote relationships between individual adults and students, as well as parents, and explicit efforts to personalize the experiences at B104 for students.

Organized Structures for Positive Connections

Social Structures Related to Personalized Learning Connections

All schools recognized the importance of one-on-one time with students, though the higher-VA schools verbalized the need for personalization of the schooling experience. B103 attributed the success of their school to the efforts made to personalize the student experience.

The higher-VA schools tended to be proactive in providing services for all students while the lower-VA schools appeared to be reactive to when students struggled. For example, in B101 and B102, guidance counselors repeatedly complained about their high student caseload, even though

counselors across the schools had similar caseloads. In interviews, school participants at B103 and B104 tended to focus on the services that they were providing to their students, specifically the high quality of the services. B104 support personnel reported that this personalized attention helped to identify and address the causes of the behavioral issues.

The higher-VA schools also had clear and consistently enforced discipline structures in place. B103 and B104 appeared to enforce disciplinary structures to facilitate a positive learning environment, whereas enforcement by B101 and B102 appeared to be more punitive and inconsistent. An example of this was the language used by adults in the schools. B103 referred to "hall sweeps" whereas at B101and B102 called "lockouts" to describe the practice of catching students in the hallway once classes had started.

Academic Structures Related to Personalized Learning Connections

There also appeared to be differences between the higher- and lower-VA schools in structures to support academic learning. The higher-VA schools had stronger academic structures, supported by the assistant principals and the guidance office, that provided a framework for personalized and consistently offered student support. At the higher-VA schools, the responsibilities of the assistant principals were focused on academics. Assistant principals and guidance counselors reported that conversations with students centered on academics, whether done casually or around discipline issues. The guidance office also provided a strong academic focus through 9th grade orientation, classroom visits to discuss scheduling, and conversations about postsecondary school plans. While all schools had these forms of support, the counselors at B103 and B104 described these as tailored to each student. For their part, the teachers at the higher-VA schools also reported this focus on academic personalization.

Bundles of Policies, Programs, and Practices

The higher-VA schools had two central structures to personalize the academic and social experiences of students and adults in the school. First, assistant principals, guidance counselors, and teachers communicated regularly about students. At B103 this was achieved through looping, in which an assistant principal and a guidance counselor shared the same cohort of students for four years and small learning communities in 9th and 10th grade, comprising English and social studies teachers, an assistant principal and a counselor. At B104, there were strong connections between the assistant principals and the guidance counselors. Second, both schools had strong disciplinary structures which, in turn, contributed to an environment where teachers and students felt safe and had trust in the school administration and teachers.

Rigorous and Aligned Curriculum

Curricular Alignment

In all of the schools, the curriculum was aligned with state standards through the district IFCs. There was also an emphasis on aligning the curriculum with assessments (FCAT, BATs, AP exams) at each of the case study schools.

Schools varied in terms of supports in place to support curricular alignment. Higher-VA schools had more systemic and formalized structures to support curricular alignment, including PLCs, vertical teams, and other professional development. In B103, in particular, there was a concerted effort to align the curriculum through school-wide initiatives. For example, Do-Now activities

were designed around identified areas of school-wide deficiencies on the Broward Achievement Test.

Alignment with feeder schools also differed between the HVA and LVA schools. Both HVA schools worked with feeder middle schools. It appeared the B104 had more formalized structures to facilitate this alignment. With the exception of the mention of "efforts" to align the curriculum with its feeder at B101, there was no evidence that the lower-VA schools were aligning their curriculum with feeder middle schools.

Implementation of Curriculum

All schools used the district's IFC to guide the implementation of curriculum. Participants at each case study school reported challenges associated with following the IFC, however, there were differences between low-VA schools and higher-VA schools in participants' perceptions of the extent to which the IFC impacted instructional autonomy and pacing. Teachers at low-VA school reported having very little instructional autonomy. The evidence at B103 and B104 was mixed. While some teachers at higher-VA schools reported constraints on instructional flexibility, others reported "having the flexibility to teach".

Rigorous Curriculum

There was mixed evidence in terms of the extent to which the district's initiative to increase enrollment in honors and AP courses was making schools more or less effective. There appeared to be a consensus among and across stakeholder groups that the district's Assignment Matrix and push to increase enrollment in honors and Advanced Placement classes had provided students who would not otherwise participate in advanced courses the opportunity to engage in a more rigorous curriculum. Evidence suggests that it was the perception of some participants that the assignment matrix posed a threat to rigor (e.g., requiring instructors to water down the curriculum because of inadequately prepared students).

Differences across the higher- and lower-VA schools were largely manifest in school-level responses to the district initiative to increase AP enrollment. There was some evidence that lower-VA schools (B101 and B102) had more indifference and less buy-in, and more participants at the lower-VA schools tended to perceive the policy as a threat to rigor. By and large, there was more support at the higher-VA schools for the district's placement policy and efforts to further increase assignment in honors and advanced-level courses. For example, at B103 administrators used the parents' option to override the district placement decisions to "opt into" honors and AP courses instead of "opting out," which is highly discouraged. B104 had also implemented a policy that required students to stay in courses for at least one term before a change in placement was considered. B104 had an informal policy that worked to ensure that students remained long enough in courses for teachers to evaluate their potential success. In contrast, lower-VA schools had policies that were much less restrictive, essentially making it easy for students to opt out of advanced-level courses on a more frequent basis.

Bundles of Policies, Programs, and Practices

Higher-VA schools had programs ensuring a rigorous and aligned curriculum that were systemic and had been maintained for several years. As noted, both HVA schools had policies that encouraged students to remain in honors and advanced placement courses. B103 used the parents' waiver to override district placement decisions to increase enrollment (opting in vs. opting out). In terms of alignment, at B103, vertical teaming and school-wide initiatives were the mechanism for across-grade-level alignment. Vertical alignment at B104 occurred through professional

learning communities (PLCs). Both B103 and B104 expressed that they had ongoing means of aligning subject-area curriculum with their feeder institutions.

Systematic Use of Data

Data Availability & Access

There were no consistent differences to report between the two higher- and the two lower-VA high schools in their access to data. Across schools, educators, students, and parents had access to the same mix of internally-generated and externally-generated student performance data. School personnel in B104 also reported having data access through a comprehensive data system that was developed in-house.

Capacity for Data Use & Action

Greater weight was reportedly placed on using data for teacher evaluation/accountability and student incentives at B102, instructional adaptation at B103, and identification/targeting of students for interventions at B104. Frequency of data use did not differ to a great extent, with most participants in all four schools reporting intermittent use of data. There did appear to be a more focused, systematic effort to develop the capacity of individuals to use data at B103, however – this included instructional faculty as well as parents.

Culture of Data Analysis & Use

In B101, B103, and B104, participants reported that they largely accepted data-driven practice in their school. Reports by participants in B102 were markedly different, offering a strongly negative perception of the culture of data-use, largely driven by the administration's focus on evaluation/accountability, often public, and the high rate of testing. Further, the majority of teachers, and some administrative participants, across all four schools expressed greater confidence in the validity of internally-derived performance data (e.g. grades, internally generated assessments, attendance data, classroom observations, and informal data). Many participants questioned the validity of the Broward Assessment Test (BAT) because students had no incentive to perform on the test because it was low-stakes. Data chats, in which administrators and teachers met to discuss student performance data, were reported as occurring with differing frequency – as often as every three weeks in B101, every quarter in B103, and very infrequently in B102. (There was little in the data to tell us how often they occurred at B104.) Perceptions of how useful data chats were as well as the ways in which they were implemented varied across schools. Perceptions of collaborative data use were especially negative in B102.

Bundles of Policies, Programs, and Practices

Educators in higher-VA schools talked about data in a safe, positive climate (not a "Gotcha!"). They adopted a balanced approach to data sources, using internal and sometimes informal data to complement externally derived data. They used data to identify/highlight students in the lowest performance band for specific programs in the school (e.g., FCAT Camp; Double-up Reading/Math; AVID; Pull-outs; parent calls).Teachers also came together around data to discuss instructional ideas for "moving" students and sharing best practices, striving to include multiple school participants in these discussions.

Variability of Schooling Experiences

Nature of Variability

Students in all four case study schools represented a wide range of ability levels; each school implemented different programs, policies, and practices to address these diverse needs. We identified three different standardized ways that schools addressed this variability: by FCAT classification and ability level, by grade level, and by AYP subgroup. In each of our case study schools, the most prevalent approach was through FCAT classification/ability level and grade level.

As mentioned above, all four schools faced demands from multiple accountability policies. All schools also faced pressure for subgroups to meet federal AYP levels; however, there was an increased focus in LVA schools on increasing learning gains to meet AYP. All schools were graded based on student performance on the FCAT. Finally, all were at some level of state intervention based on Florida's differentiated accountability (DA).

Efforts to Compress Variability

Each of the case study schools has a number of programs geared toward reducing academic differences among students. These interventions varied across schools and ranged from programs emphasizing personalized learning connections (e.g., looping, SLCs, 9th grade academies, mentoring programs, etc.) to academic supports implemented to reduce variability in academic outcomes (e.g., intensive reading math/reading programs, tutoring programs, FCAT camps, etc.).

Each of the case studies schools implemented the district assignment matrix that assigned students to courses based on student outcomes such as FCAT scores, grades, and prior academic performance. Participants across schools reported that, through the assignment matrix, the district had pushed more students into higher academic tracks, which had served as a mechanism for reducing variability in schooling experiences for students. Each school had also implemented intensive reading and math programs in accordance with Florida HB 7087 of 2006, which required that students who scored Level 1 or 2 on the FCAT Reading and Math sections be placed in an intensive Reading and/or Math class.

While all of the schools had programs to target populations based on ability level, there was evidence that programs and supports at the lower-VA schools were primarily targeted toward lower performers (i.e., students in the lower 30th percentile). For example, B101 organized a new mentoring program for the 2010-2011 school year. Teachers and administrators were asked to mentor students in the lowest 30 percent, although the program was only for students in the 9th and 10th grades, years in which both the FCAT reading and math are taken. B102 had numerous incentive programs geared toward improving the academic achievement of lower performers (e.g., mentoring program for 9th and 10th grade students in the lowest 30 percentile). In higher-VA schools, particularly B103, certain subgroups of students were targeted for inclusion in support programs based on performance or grade level; however, these programs were advertised and made available to the student body at large. For example, all students were encouraged to attend FCAT camps and tutoring programs.

There was also evidence that the programs in the higher-VA schools had been in existence longer than those in the lower-VA schools. For example, participants reported that various programs in the lower-VA schools, particularly B101, had just been implemented. There also

appeared to be more buy-in at higher-VA schools to policies and programs geared toward reducing differences among students.

Bundles of Policies, Programs, and Practices

Higher-VA schools had programs in place to minimize the variability of student experiences and outcomes and had systems in place to maintain effective programs. B103 targeted reading across the curriculum and had an active, daily, silent sustained reading program that was monitored through classroom walkthroughs. B103's looping provided students with access to at least one administrator and counselor who knew and served them throughout their high school careers. Finally, B103 had also placed students in more rigorous courses even before the district began encouraging this. B104 is the only school with an active AVID program for preparing the students of average ability for college. Other schools mentioned that they cancelled the program in the 2009-10 school year.

Connections to External Communities

Primarily School-based Parental Involvement

In working to involve/connect with parents, B103 and B104 used a wide variety of approaches tailored to different student subgroups (e.g., a transition program for ESE parents whose children are entering high school). While parent involvement was evident at all four schools, the school culture about parental involvement at B103 was notably positive and a range of different types of parents were involved. At the lower-VA schools, participants identified constraints in reaching parents or feeling burdened with the pressure to try to reach them.

Support of Student Initiatives to Create Linkages between the School and the External Community

The lower-VA schools demonstrated little evidence of support for student-led initiatives, while the higher-VA schools supported student-initiated, student-led projects.

Connections with Community that Strengthen the School

At the lower-VA schools the linkages to the community that strengthened the schools were numerous and included vocational training opportunities. At B103 and B104, there were fewer, practical community linkages, although B104 did have a strong student government-led program that participated in community service. At B104, the school partners focused on ways to provide mutual curricular support. These activities were aimed at college-bound students for the most part and sought to reinforce academic excellence in the school.

Bundles of Policies, Programs, and Practices

The two lower-VA schools had stronger relationships with programs offering vocational training opportunities. The higher-VA schools had stronger programs to facilitate student-initiated extracurricular activities. In terms of connecting with parents, the higher-VA schools used a diversified strategy for parent involvement rather than trying a "one-size-fits-all" approach. They employed different efforts for parents of specific subgroups (e.g., transition program for parents of incoming 9th grade ESE students, separate orientation and parent meetings for ELL parents). Further, the two higher-VA schools were explicit about telling parents their

expectations for parental involvement. There was evidence to also suggest that the both HVA schools encouraged students to make connections with the community. For example, at B103, students were encouraged to develop and implement a community service project. At B104, a very active student government regularly reached out to the community (e.g., food drives, judging middle school competitions).

In our analysis comparing the activities of the higher- and lower-VA schools, we identified one theme that cut across all ten of the components. In this section we discuss this major finding from the year of research in Broward County. In the subsequent section, we discuss how this theme informs the next steps of the Center's work.

The analysis of data from our qualitative case study of four high schools identified **personalization for social and academic learning** as the major finding that cut across all ten components**.** Our findings show that the higher-VA schools made deliberate efforts through systematic structures to promote strong relationships between adults and students as well as personalize the learning experience of students. In addition, the higher-VA schools maintained strong and reliable disciplinary and support systems for students that, in turn, engendered feelings of caring and, implicitly, trust among both students and teachers. Leaders at the higher-VA schools talked explicitly about looking for student engagement in classroom walkthroughs as well as in their interactions with students. Teachers at the higher-VA schools were more likely to discuss instructional activities that drew on students' experiences and interests. The higher-VA schools also encouraged stronger linkages with parents.

The higher-VA schools' programs and practices critical to personalization included the practices of looping an assistant principal and guidance counselor with the students in a grade cohort for all four years (B103), small learning communities (SLC) for 9th and 10th grade students in which core subject matter teachers (i.e., science, social studies, and English/Language Arts) meet regularly with the assistant principals and guidance counselors to discuss their shared students (B103), expectations that the assistant principals and the guidance counselors will work closely (B104) and middle school articulation (both). They also described using these structures proactively to address student issues, rather than reactively.

Participants in the higher-VA schools also consistently described a positive school-wide connection between adults and students whereas the lower-VA schools did not. They identified a number of practices that promoted these connections. The principals at both B103 and B104 both reported looking for students' cognitive engagement during their classroom observations. Looping, SLCs, and strong assistant principal-Guidance Office structures meant that adults in the school discussed and met more regularly with students, thus promoting greater personalization. While participants at all schools recognized the importance of one-on-one time with students, participants at the higher-VA schools explicitly attributed the success of their school to the efforts made to personalize the student experience. Conversely, participants in the lower-VA schools, such as assistant principals and guidance counselors, identified large workloads as impediments to personalization.

Participants at the higher-VA schools consistently described strong disciplinary systems at their schools. Participants credited the strong disciplinary structure with promoting a sense of caring and, implicitly, trust among both students and teachers. They also saw discipline as a component of a positive learning environment.

The higher-VA schools had strong academic structures that provided opportunities for students to be challenged and moved academically, whether the effort was targeted or overarching. While assigning students to challenging courses had become a district policy, this practice had already been in place at B103 for years and B104 described itself as "the Advanced Placement school." B104 also expected teachers to draw on student data to call the parents whose children were in the lowest 30th percentile. Unlike the lower-VA schools, the higher-VA schools had tough policies on course switching, choosing to provide supports through tutoring to struggling students rather than demoting them to lower level courses.

Higher-VA participants also discussed personalization efforts in the classroom. At the higher-VA schools, teachers described using informal and formal assessments to identify students' prior understanding and reported using this evidence to tailor instruction. They spoke about the importance of engaging students with the curriculum and motivating their interest in learning, not just for entertainment's sake. They described being more consistently cognizant of students' different learning styles. Teachers at the higher-VA schools were more likely to provide evidence of actively seeking new strategies and methods to reach their learners than lower-VA teachers.

The higher-VA schools also had more deliberate efforts aimed at parental involvement, particularly at home. B103 and B104 had a number of efforts tailored to different student subgroups including a transition program for ESE parents whose children were entering high school. Participants at B103 and B104 described using this diversified strategy for parental involvement rather than trying a "one-size-fits-all" approach. The administration at both schools also made explicit their expectations for parental involvement at home.

Section VII: Conclusion, Implications, and Next Steps for the Center

Personalization for academic and social learning presents an exciting and systemic way to understand the ways in which high schools support the academic and socio-emotional needs of students. In this section, we will discuss the implications of our work for both policy and practice. We will also discuss the Center's future work, particularly focusing on the scaling up the design innovation in Broward schools.

In this era of standards and accountability policies, policymakers and school administrators and teachers have identified the instructional core as the primary foci for school improvement. This study on high school effectiveness, however, turns our attention to activities in schools that both support the instructional core as well as the socio-emotional life of students. The research from this study as well as other research on personalization in schools suggests that by providing for and attending to the personalization of academic and social learning (PASL), high schools may see rewards in student outcomes.

While our study finds that personalization is critical, we do not mean to suggest that the instructional core does not matter. In fact, we believe that the high stakes context of Florida may account for the lack of instructional differences we find between schools. We suspect that certain aspects of the district context, such as a curriculum frameworks and pacing guides that are utilized with fidelity by most teachers lay the groundwork for students' exposure to the curriculum—a minimum standard for opportunity to learn. Further, we believe that there is room for instructional improvement at our case study schools. That said, our findings here provide evidence for the importance of adults in schools attending to the socio-emotional lives of students.

Our study identifies three ways in which personalization occurs in high schools: through organizational structures, by supporting personalization in classrooms, and by paying attention to students' socio-emotional needs. The HVA schools in our study engaged in deliberate and purposive activities aimed at personalizing the learning environment for students. They were proactive. They approached personalization in a systemic way. While the LVA schools had many of the same structures in place, they tended to have more fragmented systems and made less of a concerted effort to personalize the learning experience for their students. As our definition suggests, we propose that a systemic, school-wide approach should be utilized to meet the academic and socio-emotional needs for high school students.

While our study is only of four high schools, we identify two main theoretical strands undergirding personalization: the social organization of schools (Rowan, 1990) and social cognitive theory (Bandura, 2001, 2005). These theoretical perspectives offer important insights into why schools with stronger personalization may be more effective with student outcomes. Further, similar to our findings, a number of other studies have found that individual programs, such as looping, middle school articulation, data-driven practices, and behavior management systems are important supports for high school students. The consideration for implementing such programs is worthy of additional exploration as district and school leaders and teachers work toward improving educational outcomes for students in high schools.

As we move forward with the Center's work, we will focus in more detail on developing the theoretical underpinnings of PASL as well as understanding the role that individual programs and strategies play in improving school effectiveness. We have already identified national

organizations such as the Collaborative for Academic, Social and Emotional Learning (CASEL) and initiatives by the American Institutes for Research that share this focus.

Drawing on our findings from the 2010-11 study of four Broward high schools, as well as materials and summaries of the relevant research literature, the Center will collaborate with the Broward Public Schools to implement and scale up Personalization for Academic and Social Learning in three district innovation high schools. Throughout the 2011-12 academic year, the Center has been developing the process and materials around PASL that will be used by the district and its respective teams: the District Innovation Design Team (DIDT) and the School Innovation Design Teams (SIDT). It has developed curricular and instructional materials as well as a DIDT report, a document that conveys the research base behind PASL and provides specific case examples of PASL in action (See Appendix E). As this report was going to publication, this work is set to begin in Fall 2012. During the 2012-13 school year, when the scale-up process begins, the Center will work with the district and schools teams who will be challenged with developing a systemic approach to personalization for academic and social learning that meets the specific challenges and demands of each participating school.

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Appendices

Appendix A   Definitions of Subcomponents and Dimensions

Appendix B   NVivo Code List

Appendix C   CLASS-S Findings

Appendix D   PASL Case Examples

Appendix A: The Essential Components

Learning-centered Leadership: Principals engaging in learning-centered leadership prioritize student learning. They possess an ambitious vision for learning and hold high expectations for all students and staff. Such leaders (1) set a vision with specific priorities around student learning and (2) facilitate continued school improvement and support for improving instruction through collaborative, shared leadership. They engage both school-level factors (such as the school mission and faculty governance structures) and classroom-level conditions (such as student grouping and instructional practices) to focus staff, resources, and improvement strategies squarely on students' academic and social learning.

Set and implement vision for all stakeholders around student learning. This subcomponent includes evidence of leaders' efforts to set and then implement the school's vision with related goals for instruction and academics. The school leadership first engages faculty to discuss, set, and promote such a shared vision. The leadership also leads faculty and other stakeholders in identifying and prioritizing specific goals related to this vision for a school culture that supports high-quality instruction. The leadership's communication with the staff and then includes regular, consistent references to the school's progress toward this vision and the specific goals.

Leadership supports faculty in development of quality instruction. School leadership uses evaluations, the resulting feedback, and/or other discussions with teachers to guide teachers' improvement of their instructional strategies. Evidence of this subcomponent includes (1) summative evaluations that are documented for a teacher's job file, (2) formative evaluations in which leaders provide feedback teachers can use in future classes, or (3) other conversations with teachers in which leaders review pedagogical strategies or ideas to pursue.

Leadership supports faculty in development of a rigorous and aligned curriculum. School leadership engages in discussions with teachers to guide or support their review of curricular materials, adoption of new curricula, or their attempts to align them with existing learning standards.

Leadership supports faculty in developing programs or policies that promote personalized learning connections with students. School leadership engages in discussions with faculty members to guide or support the creation or improvement of opportunities for students to connect more deeply with the school or adults within the school. These include opportunities for students to develop a greater sense of belonging to the school or to develop meaningful, positive connections with adults (teachers or staff members) or other students in the school.

Leadership promotes ongoing analysis and review of school-level data. School leadership takes specific steps to (1) engage faculty in collecting data that relate to students' academic performance, (2) lead ongoing reviews and discussions of those data, and (3) guide staff in using the data to decide how best to change instruction and/or curriculum to best serve the needs of their students.

Leadership garners and allocates resources to support student learning. School leaders identify and obtain the resources that their school needs to provide quality instruction and curriculum to its students. This subcomponent includes leaders' efforts to identify those needs and then contact individuals both in and outside the school to obtain the resources for their staff.

Leadership promotes the development of teachers' instructional expertise. School leaders use their ongoing, regular classroom observations and discussions with faculty to identify areas in which teachers need greater expertise in working with their students. They both reflect on their own classroom observations and engage staff in discussions about these needs, and they make opportunities available either <u>inside</u> or <u>outside</u> the school. In-school opportunities consist of ways for teachers to meet and collaborate, exchange ideas, or observe each other during the school day; outside-school opportunities include teachers attending external training programs, external specialists coming to present to the faculty or groups of teachers, or other professional development courses through universities.

*Organization of the Learning Environment: The organization of the learning environment entails how the school's organizational structure shapes the interactions of students, parents, teachers, support personnel, and school leadership. It looks at the policies and processes by which students and teachers are assigned to classes, support systems are aligned to meet student needs, and schools are governed. Student achievement is at the heart of the academic organization of schools. Shared governance is a salient feature of school success. Power is dispersed broadly throughout a network of leadership teams. Effective schools foster functional relationships and exemplify a strong collaborative culture. In this regard, schools demonstrate flexibility in their assignment of teachers and support personnel to adequately meet the needs of students. Overall, the effective school is oriented around student achievement and organized to ensure ample participation of stakeholders.

　　　　* This component emerged from the Broward County data.

Assignment of students to classes. All schools use a district-wide algorithm to determine the assignment of students to classes. The algorithm is based on student outcomes, such as FCAT scores, grades, and prior course placement. In the main, the algorithm accurately places students in terms of their ability levels. In effective schools, school personnel are flexible about enrolling students in appropriate academic-level classes when using the algorithm would be disadvantageous. Checks are implemented at the school level to ensure congruity in the class assignments.   For instance, guidance counselors and some assistant principals (APs) engage in "correcting" computer-generated assignments. Department heads may help with the placement of students in appropriate support classes. There is strong evidence of parental and student involvement regarding decisions to move students into higher or lower level classes. Effective schools also inform parents and students of relevant school policies and practices (e.g., alternative classes, options for maintaining placement in advanced courses, college requirements, etc.).

Assignment of teachers to classes. Teacher assignment is the school-level practice in which decisions are made about teachers' assignments to specific grades, subjects, and course levels, and other curricular and extra-curricular activities. The structure of the teacher assignment process may vary across schools. Effective schools, however, adapt their teacher assignment practice in ways that align with the culture and needs of the school. The process may be formalized primarily at the administrative level, with the principal and/or AP's, or informal, with input from department heads. Teacher assignment decisions place significant emphasis on certification and experience. Other considerations include student performance, individual teacher requests, and equity. Some schools also practice "looping"—whereby teachers follow cohorts of students through each grade level.

Assignment of support personnel. How support personnel are assigned is likely to reflect the central focus of the academic organization of schools, namely, student achievement. Effective schools therefore have flexibility in their assignment of support personnel to meet the needs of the students. Assignment of support personnel varies across schools and is based on the availability of school level staff (i.e., APs, guidance counselors, reading coaches, ESE, ELL, BRACE personnel). With support personnel that provide remedial instruction and specialized services, students are identified by data reporting their proficiency levels. For instance, a facilitator works with 9th grade students pursuing a special diploma; another facilitator works with all 10th through 12th grade students; and the hearing specialist is assigned students to all hearing impaired students). Services for students may be affected by infrastructural challenges (e.g., low staffing ratios). Therefore, effective schools employ strategies to minimize issues that impinge on the responsiveness of services to students.

Assignment of leadership team. Effective schools have clearly defined leadership teams (LTs) for administration, support, and instruction. Relevant personnel include the principal, assistant principals (APs), academic department chairs (ADCs), guidance counselors (GCs), and other instructional and support staff. Effective schools develop and identify clear roles for team members in order to build functional relationships and to establish a strong collaborative culture. Administrative teams may be primarily composed of the principal and APs, with support staff embedded within the administrative leadership structure. APs are typically assigned supervisory responsibility for academic departments and grade levels. For instance, APs may work with the GCs and some subject area teachers (in small learning communities). Instructional coaches may share subject area responsibilities (e.g. math, reading). ADCs are described as resource managers and liaisons between the district and the school.

Shared governance. Shared governance is a hallmark of school success. As common practice, principals/school administrators divest some of their authority and responsibility to other school personnel and/or community members. Overall, power is dispersed broadly throughout a network of leadership teams.

Teacher hiring. Hiring practices at effective schools are collaborative efforts in which the principal, school administrators, teachers, and other relevant stakeholders are involved in the screening and selection of applicants. In the selection process, stakeholders consider the match between school and student needs and the strengths and characteristics of the applicant.

Teacher induction. Effective schools have quality induction practices that provide multiple resources to new teachers. These include routine practices that support district induction practices as well as school-level mentors. New teachers also receive substantive and quality formative and summative feedback on their teaching from the principal, other administrators, their department chairs and their mentor.

Condition of facility. Effective schools have a facility that supports the efforts of all stakeholders to provide a quality education to all students. The facility complements the learning environment; it does not place limitations on it.

Appendix A: The Essential Components

Culture of Learning and Professional Behavior: Everyone in effective high schools takes part in a strong culture of learning and professional behavior. This culture is defined by a shared focus on high expectations for students and emphasis on students' academic needs among the administration, staff, and faculty. Students internalize these cultural values, as well, taking responsibility for their own learning and working together to promote their academic success. Finally, effective cultures of learning are collaborative, with everyone across organizational levels working together to accomplish the mission of the school. Such collaborative activity is strongly supported by the school leadership, both through careful development of collaborative structures and the devotion of necessary resources.

Collaboration among adults. Personnel in effective high schools engage in frequent and meaningful collaborative activities. These activities include opportunities for *intradepartmental* collaboration, in which school actors are able to engage with peers operating in the same subject areas or discipline, and *interdepartmental* collaboration, in which they collaborate with peers outside their academic area. Collaborative activities may also occur across organizational levels – teachers, for instance, may collaborate with guidance counselors in order to meet student needs. Further, such collaborative structures may expand beyond the boundaries of the school, and offer participants the opportunity to collaborate with peers across organizations and grade levels (e.g. programs bringing middle and high school teachers together). These collaborative activities are meaningful when they are focused on the promotion of student learning, and allow school actors to enhance their practice through reflective discussion, cooperative planning, and the sharing of "best practices".

Culture of learning among adults. Effective schools operate in a culture that is focused on high expectations for student success and targeted toward meeting students' academic needs. This culture is shared among all school personnel, including teachers, administrators, and support staff. Through this culture of learning, clear goals are articulated (e.g. a focus on "the bottom 30 percent", maintaining an "A" school grade), shared among the faculty, and serve to guide the efforts of school actors as they engage in the learning process. Those sharing in this learning centered vision express high expectations for all students (e.g. an emphasis on advanced course taking), a belief in the accountability of the faculty for student success, and positive perceptions of the school's collaborative atmosphere and efforts.

Culture of learning among students. Students in effective high schools take part in a strong learning- and success-focused culture. Within this culture, students take responsibility for their own education. This sense of ownership may be expressed through self-monitoring of grades, aggressive pursuit of faculty services and participation in extracurricular or co-curricular activities. Students operating in a strong culture of learning are engaged, fully participate in their classes, and express high academic expectations for themselves. These behaviors are not only evidenced on the individual level – within the strong culture of learning, students collaborate with each other on a frequent basis (e.g. conversing about academic topics during personal time, mentoring one another through tutoring, or informally collaborating on school work). Faculty and school leaders aggressively support this culture by providing opportunities for student leadership (e.g. strong student government programs), encouraging high standards for success, and offering numerous academic and extra-curricular opportunities for students (e.g. after-school tutoring, clubs, and sports).

Appendix A: The Essential Components

Support for collaboration. Effective high schools employ and sustain governance structures that support and encourage collaboration among faculty members. As such, school leaders maintain participatory and inclusive administrative styles that allow teachers to share in instructional leadership – examples include teacher participation in the administrative team, or the inclusion of separate instructional leadership teams, with participants from multiple academic departments. Further, collaborative structures are institutionalized within effective high schools through such practices as shared planning periods, professional development days, PLCs/SLCs, and encouragement of strong departmental cultures (e.g. offering departments shared space for lunches and meetings, locating members of each department in close proximity to one another). These practices are sustained over time and supported with adequate resources, allowing collaboration to become institutionalized as a practice within the school organization.

Systemic Performance Accountability: The individual and collective responsibility among leadership, faculty, and students for achieving rigorous student learning goals.

Individual sense of responsibility for student performance.
Clear individual responsibility for student performance represents an ethos of accountability at the individual level -- distinct from, though not mutually exclusive of -- a collective sense of responsibility. School actors recognize and internalize their role in promoting student learning and other positive academic outcomes. This personal sense of responsibility orients individual thinking and behavior toward maximizing student learning and college-career readiness.

Collective responsibility for student learning. Similar to individual responsibility, collective responsibility for student learning refers to the shared, or cultural, aspects of accountability ethos. Collective responsibility is characterized by a shared belief that not only are teachers and schools capable of affecting student learning, but that they have a collective obligation to do so. However, collective responsibility is not merely an aggregate of staff members who each holds individual responsibility; it is a sense that the school, as a collective, is responsible for students' learning and college-career readiness. Collective responsibility exists where school actors either express their work in promoting student performance as being critically aided by colleagues not explicitly assigned to those students, or recognize their own role in maximizing the learning for students not explicitly assigned to them, either.

Positive relationship with external measures. Participants recognize and accept as valid external student learning measures or accountability structures such as the FCAT, ACT, AYP, and Florida Accountability program (school grades) or accountability structures based on these measures of achievement. Participants respond to these external student learning measures or accountability structures in ways that signal they are a valid measure of achievement. Discussions of the use of the instructional focus calendar do not automatically fall in this subcomponent. Statements about the use of data by itself, without an explicit statement about whether the measure provides a valid signal are not coded here. This subcomponent does not include individuals' attitudes toward the BAT because BAT is a diagnostic tool with no accountability attached.

Adults held accountable for student performance. Adults are held accountable for both the process and product of student achievement. Administrators hold adults accountable for the processes

connected to student achievement by frequently referring to established criteria and policy in meetings, performance reviews, classroom observations, and discussions of curriculum and instructional strategies. These processes, as well as student performance and progress, form the basis of adults' performance reviews. Adults understand that unsatisfactory student performance results in some form of action. Resulting actions might be either positive (e.g., instructional support, collective efforts) or negative (e.g., reassignment, dismissal, or discussions by leader about negative observations or results), but administrative response to student performance is an understood norm. Conversely, if there is no administrative response to poor performance, then adults are not being held accountable. Performance is monitored or supervised, there are consequences or rewards for performance, and feedback for improvement is provided.

Students held accountable for their performance and behavior. Student accountability includes any positive or negative response to student performance or behavior which affects the students themselves. This may include end-of-course grades, graduation exams, financial incentives, and reports to parents. Student accountability can extend beyond academic performance as students face consequences or rewards for behavior, attendance, stewardship of school materials, or other social learning goals established by the school. Use of the district program for assigning different students to classes does not qualify under this subcomponent unless a faculty member discusses students' awareness of their assignment as the result of their performance.

Personalized Learning Connections: Personalized learning connections are the ways in which students have a connection or sense of belonging to the school as a whole, as well as meaningful, positive connections with other adults (teachers or other staff members) and students in the school. At effective schools, participants (i.e. teachers, students, and administrators) report strong connections between the students and the school, as well as widely distributed meaningful relationships among students and adults at the school. At effective schools, connections between students and adults are authentic, relevant, and responsive to students' needs and interests. The opportunities for connections among students and the school interact and build upon one another. For instance, personalization and positive relationships are contingent upon the organization and structure of the school.

Sense of belonging. Effective schools make a deliberate effort to provide authentic and relevant opportunities for *all* students to participate in school-related activities and programs. Students at effective schools feel a sense of belonging to their school that extends beyond just being physically present and attending school because it is mandatory. The connection at effective schools may be evident through their *behavioral engagement* (i.e. students feel like they belong, students actively participate in class and participate in school-related activities), *emotional engagement* (i.e. the student's positive versus negative general feelings toward the school, motivation to exert an effort toward the student experience while at school, and valuing success in experiences related to the school activities, both academic and otherwise), and *cognitive student engagement* (i.e. exemplifying behaviors that indicate being engaged in class).

Positive connections between students and adults are widely distributed. At effective schools, authentic opportunities for adult-student relationships exist and there is a school culture that encourages these relationships (e.g. administration present, approachable, and engaged at school lunch). In addition to these opportunities existing, positive relationships are established between teachers and students within

the classroom that are initiated by a culture in which the teachers' expressed care and concern for a student's well-being, intellectual growth, and educational success create a positive and motivational climate for the students. These, together, contribute to a school-wide atmosphere that supports positive connections between students and adults.

Organizational structure. The school provides a formal organization and structure that facilitates positive connections between students and adults. These structures provide opportunities for students to engage in meaningful academic and social interactions with adults within the school and in the community. Formal structures provide students with clear avenues to explore learning opportunities within the school, opportunities including but not limited to course selection, career development, and after-school activities.

Quality Instruction: Teachers engaging in quality instruction (1) meet the individual needs of their students with individualized/adaptive pedagogy, (2) use collaborative learning strategies, (3) practice authentic pedagogy that relates to students' lived experiences, and (4) emphasize "higher-order" thinking skills through rigorous, challenging content. They foster the development of "higher-order" thinking skills in their students, promote creative thinking, embrace rigorous, challenging content, and incorporate real-life applications in their classrooms. In turn, quality instruction develops classrooms characterized by students' intrinsic motivation, retention of material, and positive attitudes toward learning.

Individualized pedagogy. Teachers provide appropriate feedback and scaffold each student's learning. They prompt students to explain and extend their thinking. All students have the opportunity to engage in the lesson.

Collaborative learning strategies. Instructional techniques make "students' thinking visible to both the teachers and the students" (Goldring, et al., 2007). Students' interactions with peers are structured to promote development of a deeper understanding of the content.

Authentic pedagogy. Teaching requires students to think, to develop in-depth understanding, and to apply their learning to real world events problems.

Higher order thinking skills. Instruction requires students to solve complex tasks and supports students in developing metacognitive thinking and planning skills. Students have several opportunities to work with the same concept, making connections, and developing deeper understanding. Instruction "links new concepts/broad ideas to students' prior knowledge in ways that advance understanding" (Pianta, et al., 2007).

Instructional flexibility. Teachers are knowledgeable about their students' prior understandings, anticipate students' misconceptions, and "make expert use of existing instructional materials" (Goldring, et al., 2007).

Effective classroom organization. Students are provided with clear expectations for their behavior and work, and student behavior does not distract from instruction (Pianta, et al., 2007).

Appendix A: The Essential Components

Rigorous and Aligned Curriculum: Effective schools that have a rigorous and aligned curriculum (1) align the curriculum with state, district, and school standards and assessments (2) implement the curriculum with consistency and integrity to the standards, and (3) have a rigorous curriculum that includes ambitious content and high cognitive demand for all students. That is, they ensure the availability of college preparatory courses to all students and engage all students in complex content and demanding activities that focus on inquiry and higher-order thinking, not just memorization and computation.

Alignment of the curriculum. Effective schools make deliberate efforts to align curriculum with state and district standards (e.g., vertical alignment). Actors in schools may conceive this to mean aligning the curriculum to assessments and using results of those assessments to inform instructional practices (e.g., alignment to BAT tests and development of mini-BATs). Vertical alignment may also occur as schools make efforts to align the curriculum across grade levels and/or the high school curriculum with feeder institutions (i.e. middle school). Alignment may also be conceived and evidenced in schools in other ways such as: Within-Department Alignment (i.e., efforts to align the curriculum among subject area teachers) and Across-Department Alignment (i.e., efforts to align the curriculum across departments).

Implementation of curriculum. Effective schools implement curriculum to meet state, district, content, performance, and delivery standards. Effective schools also implement curriculum consistently throughout the course of the year. Specifically, these schools adhere to their curriculum (i.e. do not suspend the curriculum for state assessment practice). Instead, these practices are integrated into daily lesson plans. Actors in effective schools also put in place mechanisms (e.g., scheduled walkthroughs by administrators, placement of standards on boards) to monitor implementation and to ensure consistency in implementation.

Rigorous Curriculum. School actors in effective schools place high value on curricular rigor. The established curriculum, aligned with the state and district standards, must engage students in complex content and demanding activities. A rigorous curriculum emphasizes understanding rather than rote memorization of facts. Students are engaged in more problem-solving and authentic instruction and activities (i.e., relevant). A rigorous curriculum occurs by blurring the lines that define course tracks, or teaching lower courses at the upper level (i.e., instructor providing the same content to students regardless of their academic track). Effective schools also adopt mechanisms and school-wide polices to support a rigorous curriculum. An example of a policy of this nature is the requirement of placing all 9th grade students in an honors or AP class to introduce them to a rigorous and demanding curriculum.

Systemic Use of Data: Effective high schools are data-driven and information-rich environments, where actors operate in a culture of data use targeted toward improving the learning experiences of students. In these schools, streamlined information management systems are in place, giving actors across organizational levels ready access to comprehensive sources of data. Administrators, instructors, and staff are well trained in the use of these systems, and systematic efforts have been made to build the capacity of all actors to make meaningful use of available information. Finally, faculty and staff utilize these resources to take action, working collaboratively to target students for intervention, adapt instructional practices, and promote student success. In doing so, they demonstrate an internalized "culture" of data

use, in which the necessity and beneficial nature of data-driven practice are an accepted organizational perspective.

Capacity for use and action. Actors operating within effective schools are trained to use data through structured professional development, and are capable of using data to impact student learning in meaningful ways. Professional development within the effective school is organized and continuous, and prepares school actors to utilize data in a variety of ways – from targeting and classifying students to adapting and modifying classroom instruction in order to best meet student needs. Further, effective school actors demonstrate that they have the capacity to translate this training into real action. Examples of demonstrated capacity for data use within schools include: the identification of students for services and intervention, the use of data in instructional planning and curriculum alignment, the use of data in administrative decision-making, and the use of data to modify instructional practices.

Culture of data analysis and use. Actors in effective schools operate in a culture of data analysis and use. Within this culture, all or most actors within the school accept data use as a necessary and beneficial part of their day-to-day activities – participants within the culture may articulate that data is "all we do" or that data are "looked at on a daily basis". Examples of this perspective in action may, for instance, include a school-wide focus on the performance of certain student groups (e.g. the bottom 30 percent). Further, structures exist within the culture that emphasize the collaborative use of data in driving student performance. These collaborative activities incorporate a number of actors and branch across organizational levels. Examples include "data chats" between administrators and teachers or administrative/departmental meetings focused on data analysis.

*Variability in Schooling Experiences: Actors in effective schools recognize that students' experiences vary and understand that policies, practices, and programs implemented at the school level can help to promote positive educational experiences across groups of students. Effective schools promote equal and equitable access to school resources, minimize differences across ability levels by having high expectations for all students, and identify opportunities to promote inclusion of all students in all aspects of the schooling experience.
* This component emerged from the Broward County data.

Nature of variability. We conceive the nature of variability in schooling experiences among students occurring by ability level and sub-groups, which are both external factors/characteristics that schools themselves cannot control. We also conceive schools themselves as a potential source of variability. That is, that schools and classrooms may introduce elements that contribute to variability of schooling experience among students. The context in which variation in schooling experiences occur within the school and classrooms might include, but is not limited to, equal and equitable access to school resources (e.g., access to school counselors); extracurricular activities; development of sense of belonging; quality of instruction, and rigorous and aligned curriculum.

Efforts to compress variability. Effective schools make an effort to compress the variability of schooling experiences for students. To meet this end, effective schools identify opportunities to promote inclusion of all students in all aspects of the schooling experience and to create a culture of high expectations for academic performance and behavior equally across all student groups.

Connections to External Communities: Connections to external communities are deep, sustained connections between the school, parents, and community that advance academic and social learning. The focus is not on what parents do, but on what the school helps parents to do. Two elements make up *Connections to External Communities*: (1) *parent involvement*, i.e., what schools encourage parents to do at school and what they do at home to support their children's learning.   An important element of parent involvement entails teachers' and administrators' roles in reaching out to parents and creating a culture that supports parents reaching in; and (2) *connections to the larger community* that enhance and support students' learning opportunities. Connections with the community entail linkages to the greater community (e.g., for internships, service projects, etc.). Effective community-school partnerships require structural support, trust among partners, and investment in collaborative work.

       Parent involvement. Teachers and administrators reach out to parents to create a culture that supports parent involvement with the education of their child. Two types of evidence of parent involvement exist. First, those that are primarily home-based, (i.e., teachers and administrators reach out to parents to help them help their children at home). They help parents establish high expectations for their children, and provide parents with the resources and ideas to support learning at home. The second type of parent involvement is primarily school-based, (i.e., creating a culture that encourages and supports parents to reach into the school). In these instances, school officials provide opportunities and encourage parents to attend school activities and be involved in the work of the school (e.g., committees, volunteer activities).

       Community involvement. Teachers and administrators establish and nurture connections with the community that enhance and support students' learning opportunities. The evidence can entail the school reaching out to the larger community to create opportunities for students (e.g., internships, service learning). This might include creating linkages to social services, community agencies, or other organizations. It might also take the form of teachers and administrators supporting student initiatives to create linkages within the community. These efforts work to tell the school story in the community. These also serve to enrich, expand and apply student learning.

NVivo Coding Framework

I. Rigorous and aligned curriculum
   1. Alignment of curriculum
      i. Vertical alignment
         a. Alignment to state and district standards
         b. Alignment across grade levels
         c. Alignment with feeder schools
      ii. Within-subject alignment
      iii. Individualized alignment
      iv. Programs, policies and procedures
   2. Implementation of curriculum
      i. School level
      ii. Classroom level
      iii. Programs, policies and procedures
   3. Rigorous curriculum
      i. Programs, policies and procedures

II. Quality instruction
   1. Individualized pedagogy
      i. Feedback
      ii. Scaffolding
      iii. Prompts student to explain and extend thinking
      iv. Differentiated instruction
      v. Programs, policies and procedures
   2. Collaborative learning strategies
      i. Student thinking made visible
      ii. Collaboration for understanding
      iii. Mode of instruction
         1. Frontal learning
         2. Groups
         3. Hands-on learning
         4. Individual seatwork
         5. Pairs
         6. Peer tutoring
         7. Presentations
      iv. Programs, policies and procedures
   3. Higher-order thinking skills
      i. Complexity of tasks
      ii. Conceptual understanding
      iii. Real-world problems
      iv. Questioning strategies
      v. Programs, policies and procedures

4. Instructional flexibility
    i. Prior understanding
    ii. Address misconceptions
    iii. Tailor to student needs
    iv. Tailor to student interests
    v. Teacher autonomy
    vi. Programs, policies and procedures
5. Classroom organization
6. No reference to quality instruction

III. Learning-centered leadership
1. Set and implement vision
2. Supports faculty in development of quality instruction
3. Supports faculty in development of rigorous and aligned curriculum
4. Supports faculty in developing programs and practices to promote PLC with students
5. Promotes on-going analysis and review of school-level data
6. Garners and allocates resources to support student learning
7. Promotes the development of teachers' instructional expertise

IV. Personalized learning connections
1. Students' strong sense of connection to school
    i. Behavioral engagement
    ii. Emotional engagement
    iii. Cognitive engagement
    iv. Parental facilitation
    v. Programs, policies and procedures
2. Connects with adults are widely distributed
    i. Positive connections are school wide
    ii. Positive personnel-student connection exists
    iii. Programs, policies and procedures
3. Organizational structures for positive connections
    i. Organized social structures
    ii. Organized academic structures
    iii. Programs, policies and procedures

V. Culture of learning and professional behavior
1. Collaboration among adults
    i. Levels of collaboration
    ii. Instructional focus
    iii. Frequency of collaboration
    iv. Programs, policies and procedures
2. Culture of learning among adults
    i. Clear, shared goals
    ii. High expectations

        iii.   Sense of efficacy

        iv.   Positive climate

        v.   Programs, policies and procedures

3.   Culture of learning among students

        i.   Academic focus

        ii.   Student collaboration

        iii.   Support for student culture of learning

        iv.   Programs, policies and procedures

4.   Ongoing professional development

        i.   Types and organization of PD

        ii.   Meaning PD

        iii.   Frequent PD

        iv.   Scaffolded PD

        v.   Programs, policies and procedures

5.   Support for a culture of learning

        i.   Participatory leadership

        ii.   Support structures

        iii.   Adequate resources

        iv.   Programs, policies and procedures

                1.   Department meetings

                2.   District structures

                3.   Physical proximity

                4.   PLCs

                5.   Shared lunch

                6.   Shared planning

                7.   SLCs

VI.   Systematic use of data

1.   Data availability and access

        i.   Types of data

        ii.   Data systems

        iii.   Programs, policies and procedures

2.   Capacity for use and action

        i.   Building human capacity

        ii.   Demonstrated use

                 1.   Typology of use

        iii.   Programs, policies and procedures

3.   Culture of data analysis and use

        i.   Data use as a school wide norm

        ii.   Collaborative culture

        iii.   Programs, policies and procedures

VII.   Systemic performance accountability

1.   Individual sense of responsibility for student performance

              i.   Programs, policies and procedures
2.   Collective responsibility for student learning
              i.   Programs, policies and procedures
3.   Positive relationship with external measures
              i.   Programs, policies and procedures
4.   Adults held accountable for student performance
              i.   Regular oversight and supervision of performance
             ii.   Feedback for improvement
           iii.   Rewards and consequences for performance
           iv.   Programs, policies and procedures
5.   Students held accountable for their performance and behavior
              i.   Students held accountable for academic performance
             ii.   Students held accountable for their behavior
           iii.   Programs, policies and procedures

VIII.   Connections to external communities
1.   Parent involvement
              i.   Primarily home-based parent involvement
             ii.   Primarily school-based parent involvement
           iii.   Parent-initiated involvement in school
           iv.   Home-school, school-to communications (emergent)
            v.   Programs, policies and procedures
2.   Connections to larger community
              i.   Creation of opportunities for students
             ii.   Support of student initiatives to create linkages
           iii.   Connections with community that strengthen the school
           iv.   Programs, policies and procedures

IX.   Organization of the learning environment (emergent)
1.   Assignment of students to classes
              i.   Programs, policies and procedures
2.   Assignment of teachers to courses
              i.   Programs, policies and procedures
3.   Assignment of support personnel
              i.   Programs, policies and procedures
4.   Assignment of leadership team
              i.   Programs, policies and procedures
5.   Condition of infrastructure
              i.   Programs, policies and procedures
6.   Share governance
              i.   Programs, policies and procedures
7.   Teacher hiring
              i.   Programs, policies and procedures
8.   Teacher induction

        i.   Programs, policies and procedures

X.   Variability in schooling experiences (emergent)
1. Nature of variability
    i.   Variability by ability level
    ii.   Variability by sub-group
    iii.   Programs, policies and procedures
2. Efforts to compress variability
    i.   Programs, policies and procedures

CLASS-S Framework and Scores

Table 1. CLASS-S General Scoring Guidelines

Low		Mid			High	
1	2	3	4	5	6	7
The low range description fits the classroom/ teacher very well. All, or almost all, relevant indicators in the low range are present.	The low range description mostly fits the classroom/ teacher but there are one or two indicators that are in the mid-range.	The mid-range description mostly fits the classroom/ teacher, but there are one or two indicators in the low range.	The mid-range description mostly fits the classroom/ teacher very well. All, or almost all, relevant indicators in the mid-range are present.	The mid-range description mostly fits the classroom/ teacher, but there are one or two indicators in the high range.	The high range description mostly fits the classroom/ teacher, but there are one or two indicators in the mid-range.	The high rang description fits the classroom/ teacher very well. All, or almost all, relevant indicators in the high range are present.

Note. From CLASS-Secondary Manual (Pianta et al., 2007)

Table 2. Overview of 2007 CLASS-S Dimensions, Domains, and Indicators

Dimension	Domain	Indicators
Emotional Support	Positive Climate	• Relationships • Positive affect • Positive communications • Respect
	Negative Climate	• Negative affect • Punitive control • Disrespect
	Teacher Sensitivity	• Awareness • Responsiveness to academic & social/emotional needs and cues • Effectiveness in addressing problems • Student comfort
	Regard for Adolescent Perspective	• Support for student autonomy & leadership • Connections to current lift • Student ideas and opinions • Meaningful peer interactions • Flexibility
Classroom Organization	Behavior Management	• Clear expectations • Proactive • Effective redirection of misbehavior • Student behavior
	Productivity	• Maximizing learning time • Routines

	Instructional Learning Formats	• Learning targets/organization • Variety of modalities, strategies, and materials • Active facilitation • Effective engagement
		• Transitions
Instructional Support	Content Understanding	• Depth of understanding • Communication of concepts and procedures • Background knowledge and misconceptions • Transmission of content knowledge and procedures
	Analysis and Problem Solving	• Opportunities for higher-level thinking • Problem solving • Metacognition
	Quality of Feedback	• Feedback loops • Prompting thought processes • Scaffolding • Providing information • Encouragement and affirmation
Student Engagement		• Active engagement • Sustained engagement

Table 3. Teacher Mean CLASS-S Scores across Case Study Schools, by Dimension and Domain

Dimension/ Domain	B101 Mean	B101 SD	B102 Mean	B102 SD	B103 Mean	B103 SD	B104 Mean	B104 SD
Emotional Support	4.97	0.784	5.34	0.522	5.32	0.580	5.07	0.748
Positive Climate	4.96	1.107	5.57	0.718	5.32	0.974	4.96	1.105
Negative Climate	6.48	0.349	6.63	0.429	6.67	0.364	6.33	0.671
Teacher Sensitivity	4.59	0.966	5.09	0.635	5.21	0.548	4.85	0.686
Regard for Adolescent Perspective	3.90	1.029	4.12	0.718	4.07	0.832	4.13	0.791
Classroom Organization	4.93	0.856	5.00	0.760	5.37	0.676	4.79	0.908
Behavior Management	4.97	0.875	5.08	0.904	5.48	0.771	5.05	1.064
Productivity	5.27	0.827	5.20	0.880	5.59	0.787	4.90	0.907
Instructional Learning Formats	4.66	0.976	4.73	0.616	5.03	0.577	4.40	0.920
Instructional Support	4.09	1.007	4.36	0.743	4.64	0.682	3.82	0.854
Content Understanding	4.55	1.042	4.56	0.688	5.00	0.707	4.25	0.891
Analysis and Problem Solving	3.47	1.043	3.98	1.031	4.16	0.786	2.96	0.871
Quality of Feedback	4.28	1.136	4.52	0.759	4.75	0.691	4.22	0.905
Student Engagement	5.00	0.801	5.13	0.916	5.17	0.643	4.60	1.066

Note. Teacher means were estimated by taking the average value of each domain score at the teacher level. Standard deviations (SD) of these scores are between teachers. Estimates of within teacher variability are available on request.

Table 4. Summary of HLM Analysis of Emotional Support CLASS-S Domains on School, Track, Grade, Subject, and Time of Year

	Emotional Support	Positive Climate	Negative Climate	Teacher Sensitivity	Regard for Adolescent Perspective
	b/se	b/se	b/se	b/se	b/se
B101	-0.648**	-0.690*	-0.185	-1.026***	-0.455
	-0.23	-0.34	-0.17	-0.26	-0.29
B102	-0.076	0.1	0.08	-0.316	-0.106
	-0.24	-0.36	-0.18	-0.28	-0.31
B104	-0.293	-0.328	-0.084	-0.578*	-0.189
	-0.24	-0.36	-0.19	-0.28	-0.31
Honors	0.178	0.361~	0.478***	-0.014	-0.076
	-0.15	-0.21	-0.13	-0.2	-0.23
B101XHonors	0.863***	0.981**	0.092	1.073***	0.974**
	-0.23	-0.33	-0.21	-0.31	-0.37
B102XHonors	0.245	0.363	-0.215	0.394	0.42
	-0.19	-0.27	-0.18	-0.26	-0.31
B104XHonors	0.08	-0.033	-0.445*	0.356	0.49
	-0.21	-0.3	-0.19	-0.29	-0.34
9th	-0.007	0.025	-0.163	-0.144	0.34
	-0.14	-0.2	-0.13	-0.19	-0.23
11th	0.633**	0.817**	0.241	0.703*	0.818*
	-0.21	-0.3	-0.19	-0.29	-0.35
12th	-0.33	-0.378	-0.407~	-0.19	-0.243
	-0.25	-0.34	-0.22	-0.33	-0.41
Math	-0.330~	-0.381	-0.258~	-0.066	-0.648**
	-0.18	-0.28	-0.13	-0.2	-0.22
Science	-0.292	-0.552*	-0.085	-0.128	-0.410~
	-0.18	-0.27	-0.13	-0.2	-0.21
Winter	-0.047	-0.06	0.173**	-0.190*	-0.033
	-0.06	-0.08	-0.05	-0.08	-0.1
Spring	-0.033	0.125	0.14	-0.260~	-0.139
	-0.1	-0.15	-0.09	-0.14	-0.17
Constant	5.418***	5.395***	6.443***	5.385***	4.385***
	-0.2	-0.29	-0.15	-0.22	-0.25
Variance Components					
SD(Constant)	0.593***	0.904	0.411***	0.618***	0.646***
SD(Residual)	0.645***	0.916**	0.615***	0.920**	1.117***
N	669	685	685	678	669
Deviance	1466.726	1989.75	1395.732	1929.108	2147.276

Appendix C: CLASS-S Tables

Table 5. Summary of HLM Analysis of Classroom Organization CLASS-S Domains on School, Track, Grade, Subject, and Time of Year

	Classroom Organization	Behavior Management	Productivity	Instructional Learning Formats
	b/se	b/se	b/se	b/se
B101	-0.616*	-0.598~	-0.332	-0.862**
	-0.272	-0.312	-0.299	-0.278
B102	-0.359	-0.306	-0.236	-0.543~
	-0.286	-0.328	-0.315	-0.292
B104	-0.593*	-0.415	-0.736*	-0.763*
	-0.291	-0.331	-0.321	-0.301
Honors	0.296~	0.437*	0.445*	-0.043
	-0.177	-0.212	-0.22	-0.212
B101XHonors	0.563*	0.382	0.108	1.345***
	-0.284	-0.336	-0.346	-0.336
B102XHonors	-0.051	-0.184	-0.371	0.454
	-0.233	-0.281	-0.293	-0.284
B104XHonors	0.068	0.037	0.103	0.281
	-0.26	-0.305	-0.32	-0.313
9th	0.039	0.034	-0.118	0.206
	-0.172	-0.206	-0.215	-0.209
11th	-0.182	0.273	-0.522	-0.204
	-0.253	-0.304	-0.321	-0.313
12th	-0.909**	-1.006**	-0.707~	-0.920*
	-0.293	-0.352	-0.37	-0.361
Math	-0.226	-0.420~	-0.041	-0.183
	-0.218	-0.247	-0.233	-0.214
Science	-0.072	-0.182	0.151	-0.12
	-0.214	-0.242	-0.227	-0.209
Winter	-0.034	0.071	0.001	-0.101
	-0.07	-0.084	-0.089	-0.089
Spring	-0.215~	0.003	-0.330*	-0.426**
	-0.126	-0.15	-0.157	-0.155
Constant	5.361***	5.407***	5.409***	5.234***
	-0.232	-0.266	-0.255	-0.237
Variance Components				
SD(Constant)	0.699***	0.786*	0.718**	0.645***
SD(Residual)	0.784***	0.953~	1.014	0.993
N	662	682	679	662
Deviance	1706.922	2012.986	2069.474	1982.15

Appendix C: CLASS-S Tables

Table 6. Summary of HLM Analysis of Instructional Support of CLASS-S Domains and Student Engagement on School, Track, Grade, Subject, and Time of Year

	Instructional Support	Content Understanding	Analysis and Problem Solving	Quality of Feedback	Student Engagement
	b/se	b/se	b/se	b/se	b/se
B101	-0.743*	-0.701*	-0.793*	-0.689*	-0.475
	-0.291	-0.304	-0.33	-0.326	-0.296
B102	-0.289	-0.621~	0.02	-0.357	-0.216
	-0.307	-0.321	-0.349	-0.344	-0.312
B104	-1.032**	-0.960**	-1.405***	-0.821*	-0.772*
	-0.314	-0.33	-0.359	-0.353	-0.316
Honors	0.131	-0.034	0.28	0.147	0.193
	-0.216	-0.238	-0.257	-0.255	-0.208
B101XHonors	0.662~	0.682~	0.561	0.695~	0.806*
	-0.343	-0.376	-0.406	-0.402	-0.33
B102XHonors	0.029	0.352	-0.412	0.265	0.318
	-0.291	-0.322	-0.348	-0.345	-0.277
B104XHonors	0.341	0.386	0.313	0.426	0.546~
	-0.318	-0.35	-0.379	-0.374	-0.3
9th	0.264	0.2	0.23	0.414	0.183
	-0.21	-0.233	-0.251	-0.252	-0.203
11th	0.224	-0.02	0.18	0.527	-0.433
	-0.318	-0.355	-0.383	-0.385	-0.301
12th	-0.354	-0.284	-0.525	-0.156	-1.256***
	-0.37	-0.412	-0.445	-0.445	-0.348
Math	-0.145	-0.162	-0.171	-0.039	-0.249
	-0.226	-0.233	-0.254	-0.25	-0.233
Science	-0.278	-0.124	-0.366	-0.326	-0.047
	-0.221	-0.227	-0.247	-0.244	-0.228
Winter	-0.174~	-0.162	-0.167	-0.155	0.114
	-0.09	-0.101	-0.109	-0.107	-0.083
Spring	-0.370*	-0.228	-0.547**	-0.308~	0.031
	-0.158	-0.175	-0.189	-0.186	-0.148
Constant	4.796***	5.179***	4.307***	4.860***	5.109***
	-0.248	-0.259	-0.282	-0.278	-0.253
Variance Components					
SD(Constant)	0.693***	0.696***	0.759*	0.747**	0.732**
SD(Residual)	0.98	1.102**	1.189***	1.196***	0.946~
N	641	641	643	657	680
Deviance	1914.192	2051.592	2156.874	2207.808	-994.769

PASL Case Examples
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We now turn to the case examples. Each provides a description of a research-based practice that is employed as part of a systemic approach to addressing personalization for academic and social learning at one or both of the high-VA schools in our study. For each case, we begin with a description of each practice as well as its research base. We follow with the ways in which the district supports the practice. We then describe the way the school implemented each practice, discuss how the practice supported personalization for academic and social learning, and provide illustrations of school implementation. Throughout each case, we then systematically identify the ten components and enabling supports that are implemented and sustained through the practice.

Case Example 1: Formal and Informal Culture of Personalization

Personalization in schools refers to the ways in which students have a connection or sense of belonging to the school as a whole, as well as meaningful, positive connections with other adults (teachers or other staff members) and other students in the school. Schools with strong personalization have "structures, policies, and practices that promote relationships based on mutual respect, trust, collaboration, and support" (Breunlin, et al., 2005, p. 24). They also attend to students' individual learning styles, interests, and needs/wants (Jenkins & Keefe, 2002). In fact, the student is the starting- and end-point of personalization, whether it is classroom-based or school-wide (Keefe, 2007).

Personalization in schools is promoted in a number of ways. It may be promoted through "small learning communities" (SLCs) composed of a specified set of teachers and students (Connell & Klem, 2006) and "looping"— intact classes maintained over several grade levels (Osterman, 2000). Another arrangement may include "advisory programs" in which students and an educator get together regularly to deal with cognitive and affective education-related issues, as in homeroom or mentoring situations (see McClure, Yonezawa, & Jones, 2010; Meloro, 2005). Meaningful student-teacher relationships are fundamental to personalization efforts (Littky & Allen, 1999). In successful personalization cultures, "*interpersonal*" accountability exists between teachers and students such that mutual commitments are met. Teachers are knowledgeable about their students, which promotes the students' participation in their own learning (McLaughlin, Talbert, Kahne, & Powell, 1990). Discipline is integral to personalized learning (Connell & Klem, 2004). Positive student-student relationships also complement such adult-student connections (Hoffman & Levak, 2003). As Littky and Allen (1999, p. 27) note, "[a] culture of sharing and respect in the student body frees students to learn from their classmates." Moreover, personalization requires purposeful effort by all adult stakeholders who are concerned with students' well-being (Hoffman & Levak, 2003). A personalized school environment reflects "an ethic of caring" that abounds beyond the confines of the classroom (McLaughlin, et al., 1990). Overall, there exists "a school culture of collegiality" (Keefe, 2007, p. 219).

> **District implementation**

The need to attend to personalization is not new in Broward County. According to *The Smaller Learning Communities Grant: First-Year Evaluation Report, 2005-06*, the district "*need[s] to further personalize the learning environment for students*" (Broward County School Board, 2007, p. ii). Hence, the initial Small Learning Communities (SLC) effort "targeted eight of the most populated high schools" (p. 1). This formative evaluation report shares findings from a survey of the eight school principals and 65 school teachers regarding the formal and informal culture of personalization in Broward schools. Perspective of students were drawn the annual "District Customer Survey." Teachers reported having personal knowledge of their students' names, cultural and academic backgrounds, and academic aspirations. Broward teachers, however, were reportedly not conversant with students' home life and

social relations (friendships). The report indicates that the following SLC-related programs were implemented in the target schools and/or existing programs were enhanced to foster greater personalization. These included: (1) a ninth-grade transitional house, (2) a whole school magnet program, (3) career academies, or (4) school-within-school models. The district has also employed several other strategies over the last ten years to promote personalization in schools including: (1) alternative scheduling/block scheduling, (2) common planning periods, (3) counselor assigned to SLC, (4) interdisciplinary curriculum, (5) interdisciplinary teacher teams, (6) adult mentors, and (7) a student advisory period/teacher advisories.

School implementation

The high-VA schools in our study promoted a culture of personalization through a number of structures, policies, and practices. Participants at the two schools consistently made explicit references to "personalization." B103 had small learning communities where assistant principals, counselors, teachers and students engaged in "the looping process." As one counselor stated, "They personalize the education… we try to take a big school and break it down to a small school, which is why we have small learning communities." Participants believed that a major strength of the school was the way "we personalize education" such that "there is a sense of community that is palpable." Administrators mentioned knowing a number of students by name. B103's principal explained further that "knowing the kids, knowing their background, and creating a sense of family I think goes a long way." At B104, data use to identify and monitor students in need and to guide their instruction was viewed as an important "personalization piece." School personnel also referred to several activities that illustrated a culture of personalization. To one teacher, "The whole personalization is what matters in this job, the key component to having success."

Supporting Personalization for Academic and Social Learning

At the higher-VA schools, both formal and informal facets of a culture of personalization are illustrated in a reciprocal relationship between two essential components: a consistent *culture of learning and professional behavior* and pervasive *personalized learning connections* associated with academic and social learning. Administrators' and teachers' high expectations for and intentional efforts to become knowledgeable about their students bolstered the students' sense of belonging and engagement in their own learning. They were **proactive** in developing and sustaining these relationships both through formal structures as well as informal interactions. They strived for **alignment, coherence, and integration** across all personalization activities. Illustrations of how the two higher-VA schools augmented the *personalized learning connections* via a *culture of learning and professional behavior* for academic and social learning are provided below:

> *Illustration A*: Crafting **alignment, coherence, and integration** across formal structures and informal practices to build and sustain *personalized learning connections* for academic and social learning.

Alignment, coherence, and integration in HVA schools were evident across structures such as looping and professional collaboration at meetings of the SLCs. An assistant principal at 103 noted that personalization with students is seen when a teacher "knows the kids' strengths and weaknesses; the kids know the teacher's expectations and his teaching method" and "there is rapport." The AP further pointed to looping and SLCs as examples of ways to facilitate personalization. He stated that "a perfect illustration about how looping is beneficial" is when a student makes connection with prior learning, such as recognizing, in a current book, themes similar to those in the play "Antigone." In the SLCs, core teachers share and meet to "discuss common students once a week—kids that are struggling; kids that are

not performing; kids that have attendance issues or behavior problems…" It is believed that the "interdisciplinary" arrangement of the SLCs ensures that there are "a lot of cross-curricular" connections.

> ***Illustration B***: Adopting a dually-focused strategy to foster relationships that epitomize and enhance a culture of *personalized learning connections* for academic and social learning.

The possession of genuine interest in and intimate knowledge of students is reflective of a dually-focused strategy in which academic demands are linked with students' social experiences. To one counselor at B103, "You get to know your kids. Teachers get to know the kids as well… It's a close-knit family because everybody wants the kids to do well." Participants also noted that personalization involves genuine caring. One teacher at B104 described an instance of asking a student about the position he played on the basketball team and what that felt like. In another instance, the same teacher researched an artist that a student had mentioned and, the next day, engaged in conversations with the student about the said artist. The teacher concluded, "I think that's an example of personalization, getting to know your students, your clientele, and it goes back to does this teacher care. Once they realize that you care, I think you will get them working and going above and beyond." Teachers from B104 also illustrated care and concern in trying to find out about their students' background. A number of them "went on a school bus and… drove through all of the low-income areas" where one-fifth of the students live in order to get a sense of the environment in which some students are expected to do homework.

> ***Illustration C:*** **Creating supports** through leadership-by-example to endorse and foster formal and informal *personalized learning connections* for academic and social learning.

Somewhat formal and informal arrangements involve having school personnel and students interact outside of the academic/classroom context. At B103, administrators reported spending the entire lunch period in the cafeteria interacting with students. Once every three weeks, however, the principal was reported to have lunch with selected seniors who had been chosen by their teachers and administrators. Students confirmed that these formal and informal interactions occurred and expressed a lot of fondness for the principal: "The principal is caring." Students also felt that high academic expectations were maintained. As one student put it, "Our school holds you to a higher caliber" and "you have to stay on top of your game." The principal at B104 also stated that he interacted with the students "in the cafeteria pretty much every day, and kids come to me all the time about anything… Very rarely do I talk to a kid and not ask about how classes are going, who is your favorite teacher, that type of thing."

Case Example 2: Coherent Behavior Management System

The foundation for a functional school environment is a coherent behavior management system that works for all stakeholders at the school. Such systems serve both the adults and students by implementing systemic behavioral accountability. In schools where there is a coherent behavior management system, classrooms are less likely to have student behavioral interruptions, allowing for a culture of learning. With coherent behavior management systems administrators support teachers in the classroom by addressing student behavior issues in a timely and fair manner. Teachers, for their part, feel that they can address inappropriate behavior in the classroom and that their decisions will be supported by the administration. For their part, students know that they will be held accountable for their actions at school and that inappropriate behavior will not be tolerated. Confidence in the school's behavior management system engenders feelings of safety and trust among administrators, faculty, students, and parents that, in turn, provides the foundation for personalization (Akey, 2006; Gottfredson et al., 2005; Waters, 2009).

Schools that have strong socio-emotional supports in place, including those that promote student engagement, high expectations of student behavior and positive school climates see decreases in the number problem behaviors (Elias, 2006; Galloway & Lasley, 2010; Pilar, 2007; Zimmer-Gembeck et al., 2006). Schools with strong professional communities have discussions about challenges facing their students. These conversations include discussions about students' discipline issues, in addition to discussions of other topics such as attendance, and academic performance (Copeland, 2010).

District implementation

In the late1990's, Broward County Public Schools was sued for unequal treatment of minorities, which included the questioning of the enforcement of disciplinary measures (Ferrechio, S & Arthur, L., 2000; Advancement Project, 2006). As a result of one lawsuit, the United States Court of Appeals for the Eleventh Circuit required Broward County Public to work toward addressing racial disparities in school discipline. In the Fall of 2004, Broward County implemented a Discipline Matrix in response to this lawsuit. This matrix continues to this day to be the guide for appropriate disciplinary action when students have committed violations per the Code of Student Conduct (Burnett, 2010). According to the current District website, "This tool is designed to offer consistency at all levels across the District so that students are disciplined fairly from school to school when their behavior requires punishment beyond the classroom" (Broward County School Board, 2011).

School implementation

At both of the high-VA schools, there exist strong and coherent behavior management systems that support each school's culture of learning. Each higher-VA school has staff, both assistant principals and behavioral specialists, who are responsible for behavioral management issues at the school. Though behavioral management was a priority at each of the high-VA schools, the structures that existed within each school were different. At B103, there was a comprehensive behavioral management structure that was recognized from principal down to the students. In contrast, at B104, the principals and assistant principals reported placing a clear emphasis on students' adherence with school rules and requirements. Administrators reported attending to the smaller rules — such as the dress code to passing time — in an effort to support academics. Both schools' administrators also recognized that good behavior and academics go hand in hand. Students at both schools described the administrators as fair and consistent.

Supporting Personalization for Academic and Social Learning

Higher-VA schools in our case study adopted a dually-focused strategy that combined the academic and the social and **allocated adequate resources in the areas of time, personnel, and physical space** which engendered *systemic performance accountability* and a *culture of learning*. **Having a leadership structure that involved a broad network of people** ensured that outcomes are diffused throughout the school.

> *Illustration A:* Adopting a dually-focused strategy that combines the academic and the social by **allocating adequate resources** to strengthen *systemic performance accountability* and to maintain a sound *culture of learning*.

The behavior management structure at B103 was comprehensive and there was a sense that all participants bought into the system. There was a focus on behavioral management structures, led by the leadership and respected by the faculty, staff, and students that guided the culture of learning within the school. Participants consistently reported that behavioral management was a not only a priority, but a strength of the school as well. The principal expressed the view that when "kids…feel a sense of personalization, discipline problems hopefully are reduced and student achievement increases." As a

result, adequate resources were allocated towards this effort. There was a "structured sense of discipline at this school" according to an assistant principal. Another assistant principal reported spending 60-70 percent of his time on discipline and described discipline as a way to "preserve the learning that goes on in the classroom." When a student was sent to the assistant principal for discipline, it was seen as an opportunity to discuss college-going goals and the student's current academic standing. At the weekly leadership meetings, the administration discussed ways to reward students with improvements in behavior. Academic structures at the school contributed to the school-wide support of the behavioral management structure. The administrators reported that looping, knowing the parents and familiarity with the students contributed to a decrease in discipline issues. The SLCs also provided the teachers an opportunity to discuss not only the students' academics but also student behavioral issues.

When describing the effectiveness of the school's discipline practices, teachers called it a "no-nonsense approach." According to one teacher, a campus guest even remarked on the good behavior of the students, explaining that "one of the things that differentiates this school from others that I know well is that…, for the most part, the administration is pretty consistent with respect to discipline." When a student was referred to the administration, administrators followed up with the teacher. One teacher explained that the principal "supports us with discipline overall, everything. If you can discipline the students you are world ahead of everything." In addition to going to the administration, the teachers described going to the athletic coaches for the support with students with behavioral issues.

A guidance counselor reported that the school has a holistic approach and focuses on students' academic, social and behavioral performance to ensure that students are doing the best that each can do. Students explained that adults in the school held high expectations for good student behavior.

> *Illustration B:* **Having a leadership structure that involves a broad network of people** and adopting a dually-focused strategy that combines the academic and the social to sustain *systemic performance accountability* and a *culture of learning*.

The behavioral management system in place at B104 was driven by a leadership structure that involved a broad network of people. The administration allowed teachers the freedom to handle discipline issues in the classroom and when applicable, refer to administrators in order to engage with the students. There was a culture of high expectations in regard to student behavior, though not enough to completely deter behavioral issues. Teachers appeared to operate independently in regard to behavior management in their classrooms. Teachers as well as guidance counselors reported that student motivation and discipline were major challenges to student learning.

At the point when a teacher refers a student to the administration for a behavioral issue, the assistant principals and behavioral specialists look at the incident in the context of the student's overall performance at school. With each referral, the assistant principals described reviewing the students' attendance, grades, and discipline information. This systematic use of data is seen as an opportunity to evaluate the status of each student and to provide a holistic approach to dealing with the behavioral issues that initiated the interaction. This sense of personalization with the assistant principals was recognized by the students as well. Students reported viewing the assistant principals as being in charge of the discipline at B104 which gave them the opportunity of getting to know them more personally than the principal.

The behavioral specialist at B104 is involved in 10th grade through 12th grade disciplinary issues. His responsibilities include keeping parents informed as to issues of concern with their student. In addition, he works to mediate teacher-student issues: "I always listen to the students and find out what's going on."

The principal specifically works to be proactive in dealing with new students that may be entering B104 with a tendency toward behavioral issues. He visits the feeder middle schools specifically to meet with

the middle school students with behavioral issues. When students are transferring into B104 from out of the zone, the principal has the student sign an agreement that includes compliance with the student Code of Conduct. The principal reported that discipline is one of the indicators monitored by the administration, along with GPA and attendance "to be top of kids to be sure they graduate."

Case Example 3: Data-driven Practice

Today's educators operate in information-rich environments, in which numerous performance data exist that may inform decision-making and facilitate efforts to promote personalization for academic and social learning (Anderson, Leithwood & Strauss, 2010). Research supports the idea that a wide variety of performance data are available to school actors (Firestone & Gonzalez, 2007; Guskey, 2007; Halverson, Grigg, Prichett & Thomas, 2007; Ingram, Louis & Schroeder, 2004; Guskey 2003). These data are derived from multiple sources; actors may, for instance, have access to data derived from external sources, like state or district performance assessments, as well as internal — and often more informal — sources like teachers' grades or classroom observations. The literature (Gallagher, Means, & Padilla, 2008; Cohen, 2003) also indicates that administrators and teachers are accessing these diverse performance data through increasingly complex information management systems. Across contexts, however, these systems are not uniform in their comprehensiveness and may be limited in the types of data they offer to practitioners (Means, Padilla, Debarger & Bakia, 2009; Gallagher, Means & Padilla, 2008).

A number of authors (Gallagher, Means & Padilla, 2008; Wohlstetter, Datnow & Park, 2008; Halverson, Grigg, Prichett & Thomas, 2007; Kerr, et. al., 2005; Murnane, Sharkey & Boudette, 2005) assert that developing capacity for data use among school actors, primarily through focused professional development, is vital in establishing effective data-driven practice in schools. School actors translate this capacity to use data into meaningful action in a variety of ways (Cohen-Vogel, 2011; Gallagher, Means & Padilla, 2008; Anagnostopoulos & Rutledge, 2007; Firestone & Gonzalez, 2007; Lyons & Algozzine, 2006). For instance, they may construct a broad typology of such uses, asserting that within local organizations, data serves to guide instructional actions, enlighten actors, and mobilize support for decisions.

District implementation

Broward County is immersed in a state accountability system that emphasizes the use of performance data in informing decision-making processes. Scores from the state assessment system, a key component of the accountability framework, are made available to school and district actors. Moreover, the district has its own assessment system, Broward's Benchmark Assessment Test (BAT) designed to mirror the Sunshine State Standards appropriate to each grade level and intended to be used as one component to guide instructional decision making. School actors in the district, as a result, have access to a variety of performance data, including scores on the Florida Comprehensive Assessment Test (FCAT), the Benchmark Assessment Test (BAT), Advanced Placement (AP) exams, and post-secondary admissions tests like the PSAT and SAT. The district has historically supported the use of such data in individual schools through the development and maintenance of infrastructure — a primary example of this is the district's provision of information management software like Virtual Counselor (for faculty and staff) and Pinnacle (for students and parents). Apart from providing the data systems, the district does not, according to participant reports, have programs focused on developing faculty members' capacity to use data through professional development. Moreover, there does not appear to be comprehensive district-wide framework for how data should be used.

School implementation

Across our case study schools, participants reported a number of commonalities in the way they conceptualized and used data. Participants in all four schools reported that they had easy access to externally derived performance data, including FCAT and BAT scores. Internally-derived performance data that were commonly mentioned included classroom observations, classroom-level assessments, student grades, and mini-BATs (diagnostic tests that were reportedly modified from district templates). Participants in all four schools reported that they accessed such data through Virtual Counselor and Pinnacle; one school (B104), however, differed from the rest in that participants reported using a school level data system that integrated diagnostic data such as mini-BAT scores with other indicators. Collaborative analysis and use of data across all four case study schools were reported as largely occurring in the context of "data chats" between teachers (or groups of teachers) and administrators; the development of faculty capacity to use data through professional development was reported as being an emphasis of such meetings at one school (B103). Finally, all four schools reported that data were used for a variety of purposes; some schools, however, reportedly emphasized some uses more than others. School leaders in B102, for example, reportedly emphasized using data to evaluate teachers and their practice, while the use of data to target students for intervention was a reported focus at B104.

Supporting Personalization for Academic and Social Learning

Higher-VA schools in our case study, in particular, were reported as leveraging the power of *systematic use of data* to bolster personalization for academic and social learning. According to participants, the successful integration of performance data into educational practice in these schools was facilitated by several enabling characteristics – in higher-VA schools, for example, data use was mediated by a focus on employing information to provide **actionable feedback**. Additionally, successful schools **created supports for the work** in that they built the capacity of instructors to use data through professional development. Illustrations of how the two higher-VA schools maximized the effect of *systematic use of data* in personalizing academic and social learning are provided below.

> *Illustration A:* Casting the identification, monitoring and **provision of actionable feedback** as integral to the *systematic use of data* to promote personalization for academic and social learning.

Reports from participants in B104 indicate that one of the key differences in the implementation of data-driven decision making at the school was a focus on using performance data to monitor and identify students in need. Faculty members shared that performance data were invaluable in targeting those students in the "bottom 30 percent" who needed personalized attention or help. One assistant principal, for example, asserted that "when it comes to raw data, that's the data we are trying to discuss to see which kids we need to make sure we highlight, which kids do we need to give that extra support…one of the things I try to do, I don't always go through the teachers' classrooms that I have concerns. I try to plan when I go through to hit kids' classrooms that I know are in that bottom quartile. Not so much from the teacher, so the teachers know, but just to put my hand on that kid's shoulder, to put a face with a name, so that when I see that kid in the cafeteria I can have a conversation, how are things going: 'These are mediation programs.' 'Are you taking advantage of the after school tutoring?' 'Are you going to FCAT camp?' That's my strategic way to give that kid that push, or that stroke they need…" Another participant asserted that "[the administration] will target; they have data…students who have had one or two Fs, they will start to pull them out. Again, as I said, there is counseling available. One-on-one conversations with teachers. , parent contact, administrative contact. I mean, we try, we really do. It's not just 'well you have two options, you could be successful, or unsuccessful, and that's your choice' and we back off. We don't do that."

Illustration B: **Creating supports for the work** of promoting personalization for academic and social learning by developing actors' capacity to *systematically use data*.

Participants in B103 indicated that one practice supporting their ability to promote personalized learning for their students was the administration's effort to build their capacity to use data through professional development and collaborative analysis. To do so, school leaders instituted professional development centering on the analysis and use of performance data; one assistant principal shared that "teachers, at the beginning of the year, have to look at their students and scores, and we make them do it by hand and put them into boxes, as to where they fall into percentile of the strategies. So they have something they can look at when the class comes in, and they have 15 kids over here say in [ELA STANDARD] and they know its words and context, so they need to be doing more words and context with that group." A teacher shared how this training helped him/her to use data in personalizing classroom learning: "We have to analyze our data. There is the time we come in, during planning time, and we have to attend a workshop so to speak on analyzing your data. We have a guidance counselor that's there. We can call them over if we have any questions. You are supposed to focus on your students that are in the lower percentile for a certain area. Then we do look and see where their weaknesses are, and we are supposed to gear, probably some of the times, how we word our questions for different curriculum, and try to gear it toward helping them succeed with whatever their weak points are."

Case Example 4: Looping

Looping is a practice in which schools match teachers, administrators, and/or guidance counselors with students for two or more consecutive grade levels. While staff/student and year configurations differ by school, the purpose of looping is to build relationships between faculty and staff with students and their parents (Burke, 1997; Cistone, 2004). Looping is typically seen in elementary and middle schools, but can also be found in high schools where administrators, guidance counselors, or teachers loop with students at some point during the four years (Pedante, 2006).

Looping has proved to be an effective process that decreases student anxiety, increases student achievement, supports instructional time, and provides enhanced relationships between adults in the school and students and parents (Burke, 1997; Pedante, 2006). Studies on school effectiveness find that when students build relationships with adults in the school, there is both higher student performance and teacher satisfaction (Ovalle, 2004). Burke (1997) identifies a number of studies that have evidence of positive outcomes associated with looping. These studies find an increase in personalization and stronger relationships as positive outcomes that contribute to student success. In a study conducted in Ohio, schools with multi-year teacher student assignments were found to have students who performed higher in reading and math, teachers with a higher level of performance, and parents with more positive experiences and perspectives in dealing with the school (Hampton, Mumford, & Bond, 1997). In another study, George, Spreul and Moorefield (1987) find that longer relationships with students allow teachers to create positive relationships with the students and parents, while the students feel a part of the group and more comfortable participating in class.

District implementation

In the Broward Public Schools, looping appears to be voluntarily implemented as a pedagogical and administrative strategy at the school level.

School implementation

At B103, we found two types of looping. In one form, an assistant principal and guidance counselor were assigned to an incoming ninth-grade class with which they looped until the students graduated. This type of looping with the administrators and counselors had been in place for at least six or seven years. In the other form of looping, low-performing students were matched with a social studies and an English teacher in ninth grade. These students looped through tenth grade with these teachers. This looping had been in place for three years. These two structures overlapped with the assistant principals and guidance counselors often joining the weekly meetings of the teachers to discuss students' progress. Administrators, guidance counselors, teachers, and students at the school identified both sets of looping as helping to create personalized learning connections that support students' academic and social development. One administrator reported, "You got four adults who have the same kid for two years, so you are really creating a sense of personalization." Not only did these teams work closely together, but the administrator, guidance counselor, and administrative support had offices next to each other to promote informal as well as formal interactions between different adults and students.

Supporting Personalization for Academic and Social Learning

Looping leverages several of the essential components identified by the NCSU's framework in the service of personalization for academic and social learning. These components include *personalized learning connections*, *organization of the learning environment*, and *culture of learning and professional behavior*. Based on participant reports, looping was an integral component for supporting sustained personal relationships among faculty, staff, students, and their parents — a means of **promoting open communications across all stakeholders.** Looping was a prime example of the adoption of a dually-focused strategy that combines academic and social supports; personalized structures were thus created to improve students' prospects for success. By **allocating the resources** to implement the looping structure, the staff was able to provide personalized academic and social supports for the students. Team effort **fostered alignment, coherence, and integration** throughout the student's schooling experience.

> *Illustration A*: Providing administrators, guidance counselors, and teachers a framework that incorporates a dually focused strategy that combines the academic and social structures and promotes **open communications across all stakeholders** leading to *personalized learning connections* that facilitate the personalization of academic and social learning.

Looping among administrators, guidance counselors, and teachers created both an academic and social structure that supported student learning. Participants reported that staying with the same group of students over multiple years facilitated strong and meaningful relationships with administrators, faculty, and staff along with the students and their parents. According to one assistant principal, "I have met with some of these parents on a regular basis over the last two years. So from an administrative standpoint, yes, that process is still in place, and it's invaluable to our success." The relationships with the parents, getting to know them and communicating over a sustained period of time, also resulted in a reduction in disciplinary problems with these particular students.

The administration recognized that looping is effective in building personalized learning connections between the students and the teacher, and remarked on the importance of those relationships, "There is personalization with the kids. [The teacher] knows the kids' strengths and weaknesses, the kids know the teachers' expectations and his teaching method. So in a perfect environment you keep that looping process to be fluid, because it's effective, especially with our struggling learners. They need a common face. They need somebody they have a rapport with already. So, that's critical."

Support personnel reported positive outcomes resulting from looping and the opportunity it provided to build relationships between students and teachers, explaining, "Yes, looping. So [teachers] loop with those students. That's been something that's big for us. It's allowed the students and teachers and parents to get comfortable with those students in every aspect to where they got to know them on a personal basis." Another participant concurred, "So this whole idea – I keep coming back to personalization, knowing the kids, knowing their background, and creating a sense of family. I think goes a long way."

> **Illustration B**: Looping supports *personalized learning connections* and creates organized structures within the learning environment. These structures create opportunities for students to cultivate a connection to the school, by developing students' emotional, behavioral and cognitive engagement in the classroom as well as **fostering alignment, coherence, and integration** across the students' schooling experience. *Personalized learning connections*, the *organization of the learning environment* and the *culture of learning* among students that is facilitated by looping promotes the personalization of academic and social learning.

Looping created opportunities for teachers and students to build both academic and social relationships. A good example of this is at B103 when students were discussing an assigned text in an English class. As this was the second year of English with this particular teacher, the students were very comfortable with the teacher and his expectations. During the discussion, students made connections between a book they had read the previous year and the current text. Adults at B103 explained "in a perfect environment, you keep that looping process to be fluid [sic], because it's effective, especially with our struggling learners. They need a common face. They need somebody they have a rapport with already. So, that's critical."

Case Example 5: Curricular Alignment

Anderson (2002) describes curriculum alignment as, "a strong link between objectives and assessments, between objectives and instructional activities and materials, and between assessments and instructional activities and materials….Content validity, content coverage, and opportunity to learn are all included within the more general concept of 'curriculum alignment'" (p.257). Put more simply, Savard and Cotton (1982) define curricular alignment as the alignment of curriculum, instruction, and assessment. Aligning the school curriculum with state standards is similar to classroom instructional design promoted in Wiggins' and McTighe's (2005) Understanding by Design framework – the goals drive what materials and processes to use.

Anderson (2002) provides a rationale as to why curricular alignment is important: (1) curricular alignment informs stakeholders of what students have learned in school giving a sense of whether schooling has been effective, and (2) aligning the curriculum to a certain standard assists in achieving the goal of teaching all students to the stated standard and not marginalizing the educational experiences of certain groups. Cohen (1987) reviews three alignment studies that suggest that aligning the curriculum with what is to be assessed "routinely" creates a 1.2- to 3-point standard deviation effect size difference between treatment and control groups. These differences were made more sensational by the claim that instruction was delivered with "minimal instructional effort" (p.18-19).

District implementation

BCPS ensures schools' curricular alignment to the Sunshine State Standards and, therefore, to the FCAT through electronic distribution of instructional focus calendars (IFC) for each core subject. In addition to

promoting curricular alignment, the IFCs are also aimed at ensuring that instructional pacing is similar across schools by identifying what concept is taught when and for how long.

School implementation

Higher VA schools in our sample made efforts to align curriculum across grade levels and involve feeder middle schools in the process. The formalized, sustained alignment across grade levels appeared to occur through PLCs or SLCs. Though the district created and distributed IFCs to schools, higher-VA schools used assessment data to develop school site-based IFCs that guided the curricular content, sequence and pacing to targeted student deficiencies. For example, one assistant principal at B103 reported using data from state and district assessments to make school-wide curricular and instructional decisions: "I have to use the data to make curricular decisions or instructional decisions. One example would be at the beginning of the year when we take a look at last year's FCAT results. …It's my responsibility to share with the faculty and I use it to drive our instructional focus calendar. Areas of deficiencies, school-wide, will be used as important or priority areas of instruction at the beginning of the school year. The calendar will give us a particular date that we are going to work on specific strands and dates they are going to test again and review the results. So it's what drives us, or what drives our decisions." Participants at B103 also reported using Do-Now activities, a school-wide warm up curricular activity that is aligned with state achievement tests. Still other means of ensuring alignment was through collaboratively developed assessments wherein one unit test was created for an entire department. Finally, higher-VA schools practiced cross-curricular alignment and planning (e.g., language arts teachers planning with social studies or science planning with math).

Supporting Personalization for Academic and Social Learning

Compared to schools with lower-VA scores, schools with higher VA scores enabled personalization for academic and social learning by using data for identification of potential problem areas, monitoring of student progress after identifying and correcting problem areas, and **providing feedback** so students can learn to correct themselves. These schools were **being proactive rather than reactive**. Higher VA schools facilitated a *systemic use of data* that informed curricular decisions such as a site-based IFC or targeted Do-Now activities. Having **open communication across stakeholders** allowed the discussion of ideas, leading to *aligned curricular* activities such as the Do-Now activities or silent sustained reading.

> *Illustration A*: Using data for identification, monitoring, and **providing actionable feedback** creates an atmosphere of *personalization* **and proactivity** that **fosters alignment, coherence, and integration across activities** and assists with *curricular alignment*.

Administrators at B103 task teachers with identifying their student needs at the beginning of the year. Each teacher must identify in which FCAT strand his or her students need additional assistance. With that list, teachers then create lessons specifically for the areas of weakness and spend extra time on those areas as necessary. One example of this practice at B103 at a school-wide level is the use of benchmark testing data to create specific Do-Now activities to address FCAT strand deficiencies. The principal reported aligning school-wide initiatives with the results on state and district assessments: "… this is what we have, so she (referring to a teacher at the school) developed a program where the Do-Nows would revolve around where we were weak in the BAT data. We went back and forth, and I went around the table and said, what do you think; do we change the plan now on this, and they said, this is what we have. So, I shouldn't take that lightly. We did. She will tell you. You ask her. We went with her plan."

Just Read, Florida! is the state's reading initiative. The two higher-VA schools display their belief in the importance of reading via their reading across the curriculum efforts. Both schools reportedly have a

version of silent sustained reading, although the intensity of the program was more evident and stronger at B103 where the students read for twenty minutes daily.

> ***Illustration B*:** Efforts at **being proactive** in *curricular alignment* **fosters alignment, coherence, and integration** across activities.

At B104, and to a lesser degree B103, there were efforts and structures in place to align the curriculum between the high school and its feeder middle schools. Administrative participants reported that the alignment occurred through vertical teaming and PLCs, stating "there is a group that goes to the feeder middle schools a couple of times a year to discuss…how they are implementing vocabulary, and how they are going to continue its implementation at the high school level." These meetings with feeder schools allowed participants from participating schools to find that "one school was kind of in alignment with where we are, and the other was totally off the mark when it came to what we were expecting." This type of proactive collaboration allowed stakeholders to rectify potential issues before they became larger problems and fostered a common belief in the importance of curricular alignment from feeder schools to their high schools.

Case Example 6: Feedback Orientation to Classroom Observation

Teachers face increasing instructional challenges that provide opportunities for instructional leadership. Major challenges to teacher effectiveness identified by principals involve classroom management skills, lesson implementation skills, and rapport with students (Torff & Sessions, 2005). Performance feedback based on classroom observation is viewed as a promising strategy for informing and sustaining effective instructional practice and improving academic, social, and behavioral outcomes (Colvin, Flannery, Sugai, & Monegan, 2009). Of necessity, feedback is oriented toward enhancing personalization. Colvin and colleagues (p. 96) posit, "Performance feedback through the use of objective observational methods can serve as a means by which teachers learn how to examine relations associated with instructional materials, tasks, and student behavior."

A variety of characteristics are associated with feedback. A literature review on feedback identifies three categories of feedback. These include: "(1) the nature of the feedback [the content and the means of delivery]; (2) the temporal dimensions of feedback (frequency and whether it is delayed or immediate), and (3) who delivers the feedback (peers or supervisors)" (Scheeler, Ruhl, & McAfee, 2004, p. 397). Two other factors involve the communication of feedback: (1) how the feedback is given and (2) how it is perceived (Coe, 1998). To Scheeler and colleagues, teachers' performances improve with optimal feedback, which is "positive, specific, and corrective." This leads to better engagement with students. It is believed, moreover, that 'immediacy' is the most demonstrably effective characteristic of feedback. Therefore, the reviewers recommend that, "supervisors should seek ways to provide feedback as close to the occurrence of teaching behavior as possible" (Scheeler, et al., 2004, p. 404). Coe concludes that it is important that feedback has a "diagnostic function" and focus on specific elements of a task. Together, these features should allow teachers to pinpoint salient concerns about the given task — hence averting focus on extraneous matters (such as feelings of inadequacy) — and to determine the extent to which their goals are being achieved.

Secondary school teachers may (be observed by and) receive feedback about their performance from an administrator (principal, assistant principal, or department chair) and peers, as well as through self-assessments (Freiberg, 1987). By virtue of their unique position as instructional leaders, principals are expected to provide feedback to teachers to enhance the teaching-learning process (Ovando, 2005). In this

regard, they assume supervisory and evaluative roles, which have implications for the types of feedback teachers receive. Ovando, however, proposes that constructive feedback should be *formative* — in contrast to the use of summative evaluation. "Supervisory feedback" then can be seen in the context of professional development (see also McQuarrie & Wood, 1991). As it were, "the principal becomes less an inspector of teacher competence and more a facilitator of teacher growth" (Marks & Printy, 2003, p. 374).

District implementation

As described in the district's Instructional Personnel Evaluation System (IPES), the principal/assistant principal "is responsible for evaluating all Instructional Personnel (Broward County Public Schools ([BCPS], 2012*a*, p. 5). Other trained personnel may be "a regular integrated part of the observation and feedback process," including peers, curriculum specialists, grade chairpersons, department chairpersons, and instructional coaches (BCPS, p. 10). The IPES is an ongoing process of observation and feedback to ensure continuous professional improvement. Based on Robert Marzano's evaluation system, three types of classroom observations are described: *informal*, *formal*, and *targeted*. The district's IPES seeks to foster "a supportive, positive" orientation to enhance performance by acknowledging competence and accomplishment.

School implementation

Within the two high-VA schools, school administrators (assistant principals) typically conducted observations or "walk-ins" and provided systematic feedback to teachers. The principals and department chairs also conducted "walk-throughs" and some teachers engaged in "peer observations." Assistant principals were assigned to (or matched with) specific teachers, a grade level, and/or a core subject area (as in B104). Teachers referred to a "classroom observational tool" which was a checklist that was used to provide teachers with "very specific feedback" about how well they were doing. Reportedly, department chairs sometimes used a more informal approach — taking notes and then providing feedback. Some teachers stated that they received feedback once every month. To other teachers, it appeared that "they [assistant principals] come every week." New(er) teachers were observed more and received more extensive and "constructive feedback." Feedback was viewed as a means of support from an administrator, which provides insight into a teacher's strengths and weaknesses. One assistant principal saw classroom observation and feedback in terms of "helping mentor and coach our teachers." A principal affirmed, "They are not going in to observe in a negative way; they are going in there from a support side."

Supporting Personalization for Academic and Social Learning

The orientation of the observation and feedback processes accommodates the interaction of several of the essential components identified by the NCSU's framework in the service of personalization for academic and social learning. It appears that administrators and department heads demonstrate *learning-centered leadership* through the use of *systemic performance accountability* as per classroom observations and feedback, and have **adopted a solution-oriented approach**. With an organized pattern of observation and feedback, teachers are more likely to maintain an environment that reflects a *culture of learning and professional behavior.*

> *Illustration A:* **Creating supports for teachers** through *learning-centered leadership* to ensure classroom observations are accompanied by constructive feedback is integral to *systemic performance accountability* and fostering academic and social learning.

Participants indicated that the supportive pattern of observations and feedback from administrators was aimed at encouraging teachers in every grade to provide the best learning opportunities for students. Administrators reportedly provided regular behavioral observations of teachers to determine whether

particular instructional aids (e.g., "word of the day, "TRIP") are being used, and that students are actively and authentically engaged in their work. Teachers became aware of the expectation that they follow the school's instructional "prescription" to ensure that "the kids are engaged in doing it." The intent, according to one principal, is that "they [the students] are in the best position to be successful."

> ***Illustration B*: Creating supports for teachers** and **adopting a solution-oriented approach** via constructive feedback as an essential function of *systemic performance accountability* to sustain a *culture of learning and professional behavior* that enhances conditions for personalization for academic and social learning.

According to a department head at B104, there were expectations that administrators use "formative observation" as well as some summative approaches "to give them [teachers] the opportunity to change and improve upon some things." Administrators were also expected to "become more a role model" and suggest specific professional development training programs or other interventions if specific deficiencies were identified during observations. Teachers tended to view the feedback as generally positive and helpful. One teacher at B103 disclosed that an administrator provided feedback in the way she typically asked students questions — questions were not directed at any particular student — and she acknowledged the need to work on that aspect of her instruction. Efforts by administrators appeared to be focused on finding solutions to teachers' problems. As an assistant principal at B103 explained, "If we don't see a teacher doing the right thing we call them in… I don't believe in letting a teacher not do the right thing and all of a sudden come in here and say, you are not doing the right thing. If I see somebody that's not doing teaching the right way, or being good for children, it's right then and there, we will have a meeting the next day and I will tell them how I feel and what they need… Hopefully we can straighten it out, and if it doesn't get straightened out then, we will take the next steps or measures to do the right thing, which would be get them support."

Case Example 7: College Readiness Programs

College readiness programs are one strategy that schools have used to increase personalization in schools. One of the schools in our study had implemented a common readiness program — AVID, or Advancement via Individual Determination. AVID is an elementary-through-postsecondary college readiness system that is designed to increase school-wide learning and performance. Developed in response to desegregation efforts in San Diego during the 1980s, the program has expanded rapidly across the nation. The Avid.org website asserts that "beginning with one high school and 32 students, AVID now serves over 400,000 students in nearly 4,500 elementary and secondary schools in 47 states, the District of Columbia and across 16 countries/territories" (Avid.org, 2012). The program's website further indicates that it has been highly successful in promoting academic success among participants, claiming that "since 1990, more than 85,500 AVID students have graduated from high school and planned to attend college. Of the 22,210 AVID 2010 seniors who reported their plans, 91.3 percent intended to attend a postsecondary institution; 58.3 percent in four-year institutions and 33.0 percent in two-year institutions" (Avid.org, 2012). At the secondary level, the program functions by targeting students in the academic middle who "have the desire to go to college and the willingness to work hard" (Avid.org, (2012). These students are enrolled in advanced courses — honors, AP, or dual enrollment, while also taking an elective course providing a curriculum focused on "organizational and study skills." This elective course also provides students with the opportunity to "work on critical thinking and asking probing questions, get academic help from peers and college tutors, and participate in enrichment and motivational activities that make college seem attainable" (Avid.org, 2012).

A number of studies, many published by scholars affiliated with the AVID program, indicate that participation is related to several beneficial effects, ranging from increased teacher leadership to student

achievement growth in schools with high minority populations (Watt, et. al., 2009; Watt, Huerta & Mills, 2009).

District implementation

The district first instituted AVID in 2002-03 with the goal of promoting advanced course-taking and postsecondary enrollment for students who might not otherwise do so. The program was offered in three high schools in 2003-04 — all described as being "high poverty schools" — and expanded to a fourth in 2004-05. During this period, the district conducted a small study on the efficacy of the AVID program. They found that while the enrollment rates of 10th graders included in the sample were higher than non-AVID students, there were no significant differences in FCAT scores between the two groups. Participants reported that budgetary concerns in the district prompted the eventual termination of official use of the AVID program's curriculum and professional development system. The district maintained the general framework of AVID, however – especially the use of an academic skills elective for "middle" students in advanced courses – under the umbrella of the Cultivating Achievement and Thinking Skills (CATS) program. In the case of the CATS, "middle" students are defined as students scoring a level 2 or 3 on the FCAT who may eventually enroll in advanced courses as well as a specific CATS course.

School implementation

According to participants, school B104 implemented the CATS program "four or five years ago." In addition to utilizing the district framework for CATS, however, the school initially defined a team of teachers — in math, science, geography and English/Language Arts — as "CATS teachers." Incoming 9th and 10th graders participating in the CATS program were put into cohorts in the academic courses taught by these instructors, in addition to the standard academic skills elective. Participants reported that, during the early years of program implementation, this CATS "team" met on a weekly basis to discuss their shared students, and were given common planning time to do so. Due to budget constraints, the program has been cut in the last year resulting in such "cohorting" only occurring in English, math and the CATS elective; additionally, CATS teachers no longer share planning and meet far more infrequently.

Supporting Personalization for Academic and Social Learning

The AVID/CATS program leverages several of the essential components identified by the NCSU's framework in the service of personalization for academic and social learning. These components include the *organization of the learning environment*, *personalized learning connections*, and the creation of a *culture of learning and professional behavior*. Also, *variation of school experiences* is addressed. Based on participant reports, the success of the AVID/CATS program in driving student achievement at B104, in particular, stems from the further mediation of these aspects by several enabling supports; these supports include the school's adoption of a dually-focused strategy combining the academic and social, **the allocation of adequate resources**, and use of targeted yet inclusive strategies that productively **resolve the tension between high expectations for all and the need for individualized experiences**.

> *Illustration A*: Adopting a dual-focused strategy by *Organizing the Learning Environment* to create *Personalized Learning Connections* to promote academic and social learning.

Participants reported that through AVID/CATS implementation, students were provided with deeply personal learning connections to both their peers and teachers through the school's use of cohorts. Students were reportedly assigned to their primary academic courses (math, science, geography, and ELA) as a group, as well as the AVID/CATS elective, allowing them to develop a peer network providing both social and academic support. One student described the deeply supportive nature of this peer community, sharing that "I think this year, if I didn't join the CATS program, and I have the classes I have now, I wouldn't be like – my GPA wouldn't be anything like it is. My GPA went up from 3.3 last year to

3.6 this year. Mostly it's because the kids in there, like it's a family as well, where we all sit around and help each other with homework because we all have the same homework. It's not like we give someone our homework to copy. We sit in big circle, and study for a biology test because we all have the same test, or math test." Further, personalization for social and academic learning was enhanced by the creation of a dedicated team of AVID/CATS instructors who shared students and were able to provide a stable network of adults to support students within the school. One participant described the depth of the ties between students and teachers participating in the AVID/CATS program at B104, sharing that "It was like a team and family. They feel like a family. They all work together. They go to classes together. And the teachers commonly plan together, so they do things together in order to help all of them be successful."

> *Illustration B:* **Allocating adequate resources** to build a *Culture of Learning and Professional Behavior* while promoting the personalization of academic and social learning.

Another powerful aspect of the implementation of CATS/AVID in B104 was the creation of a "learning community" of CATS/AVID teachers, actively fostered by the dedication of time and resources on the part of school leadership. A prime example of this was the provision of shared planning time for CATS/AVID teachers, allowing them to meet together to discuss shared students, identify potential issues, and create opportunities for personalization. One teacher, describing the program in its fullest implementation, asserted that "It [was] like a school within a school. It [was] a very small learning community. We [met] to discuss those kids… I must say, for four years I was very proud of that program". Another teacher affiliated with the AVID/CATS program in the school explained the power of such structures, sharing that "we all shared the same group of students, so I got to see you along with the English teacher, the science teacher, the social studies teacher, and the research teacher, almost like that middle school concept, where you had the same group of teachers. So we got to know you, from the time you walked into the school, until you left. It involved a personalization. It incorporated meeting with the parents when there was an issue. A lot of student conferences. I am very proud. Our first year students were so successful and some of them were the first of their family to go to college."

> *Illustration C:* Using targeted yet inclusive strategies to limit *Variations in Schooling Experiences* and to build *Personalized Learning Connections* consistent with personalization for social and academic learning.

Adoption of the AVID/CATS program at B104 signaled an understanding that students' experiences and needs vary. There is evident awareness that, as one guidance counselor puts it, "those kids in the middle fall by the wayside." As compared to programs for higher performing and lower performing students, "This was that cache in the middle," as one assistant principal referred to the program. The AVID/CATS program provides an organized learning environment that aligns the support systems with student needs. Per participants, students are given additional support in the form of tutoring, extra guidance toward higher education, as well as a course on academic and social skills. One guidance counselor noted too that the AVID and CATS programs "have a counseling component to them; so they are very individualized."

Case Example 8: Instructional Coaching Teams

Traditionally, school systems have maintained organizational structures that favor a professionalized, and largely autonomous, base of "line" teachers, with a middle level of school administrators possessing a moderate degree of control over classroom practice; these structures are often governed, in turn, by

district administrations that have few direct controls over classroom activity (Mintzberg, 1980). The pressures of the national movement toward standards and accountability, however, have introduced new pressures on districts to achieve a greater level of standardization in instructional practice and capacity. As such, schools may be adapting to create more fully developed technocratic structures, allowing for the centralized analysis, evaluation, and development of practice within the school. Often, these structures take the form of teams of "instructional leaders" or "coaches." Boston's public schools, for instance, have reportedly seen significant success in forming instructional leadership teams drawing upon the expertise of experienced teachers (Berg, Miller & Souvanna, 2011). Reform efforts in the San Francisco Bay area, similarly, employed "reform coaches", who served to "ensure that the school vision for instructional improvement gets enacted successfully in classrooms and that teachers have the tools and knowledge they need to make appropriate and significant changes in their practice" (Coggins, Stoddard & Cutler, 2003, p. 8). In this context, the "coaches" accomplished these goals by "building leadership capacity for instructional improvement, knowledge management and boundary spanning, directly coaching teachers and building capacity for instructional support" (Coggins, Stodday & Cutler, 2003, p. 39).

There is little consistent empirical evidence, however, indicating that such teacher leadership structures have positive effects on student achievement, and most of the literature regarding such practices has been descriptive in nature (York-Barr & Duke, 2004). The existing literature does indicate, however, that teachers operating in such roles gain valuable professional experience, and that student effects are more likely if the work of teacher leaders is directly focused on classroom-level practice (York-Barr & Duke, 2004).

District implementation

There does not appear to be a unified framework for the provision of structures like "instructional teams" or "reform coaches" across the Broward County School District, based on a review of the district website and other online sources. Academic coaches – primarily reading coaches – are, however, reported by participants to be one of the few common structures functioning across schools to facilitate instructional leadership. One participant described the position of the reading coach as encompassing student placement (for reading), modeling, co-teaching, and working to implement reading strategies across departments. Funding was reportedly inconsistent for such positions, however; one participant in our case study schools reported that she or he was uncertain about the future stability of his or her position as a reading coach, due to resource issues. Other coaching positions were discussed in individual school improvement plans and may address other tested subjects, like math, but the universality of such positions across schools in the district is unclear. The survey activities planned by NCSU may provide more complete evidence.

School implementation

In the 2010-2011 school year, B104 implemented a new instructional coaching framework, tapping one of the school's instructional coaches to assemble a team of teacher leaders from across the academic departments tasked with directing the school's instructional reform efforts. In this role, the "lead instructional coach" is reported to coordinate a variety of activities, including: reading pull-out programs, the school's Saturday FCAT camp, integration of reading strategies across departments, organization of the school's professional learning communities (PLCs), and the monitoring and collective analysis of student performance data. Acknowledging both the importance of instructional leadership and the pressures on administrators' time from other areas (e.g., discipline, safety, facilities, operations, community partners), the school's principal articulated a need in his school for a team focused squarely on instruction, sharing that "I wanted to make sure that I had someone that I trust that was going to kind of lead the way -- someone I could pick-up the phone at any time of the day, any part of the week, pick-up the phone and we could discuss curriculum if I needed to."

Supporting Personalization for Academic and Social Learning

Participants reported that the instructional coaching team at B104 appears to be leveraging several of the NCSU's essential components and enabling supports in order to drive personalization for academic and social learning. The team structure in place at the school, for instance, facilitates *learning-centered leadership* empowered by **a goal-driven focus on the part of leadership, faculty, and staff that guides actions and structures.** The instructional coaching team at B104 also provides a focal point for enhancing the instructional capacity of school actors by leveraging *systematic use of data* to **foster alignment, coherence, and integration across activities** in the school. Each of these examples is expanded upon in the illustrations below.

> *Illustration A:* Empowering *learning centered leadership* by emphasizing a **focus on the part of leadership, faculty, and staff on a goal** of personalization for academic and social learning**.**

Participants reported that one of the primary tasks of the new instructional coaching team at B104, headed by the lead instructional coach, was to provide a central structure guiding the school's efforts to "move" student reading achievement. To do so, the lead instructional coach focused on bridging gaps between academic departments and directing the collective attention of the faculty toward meeting one of the most significant identified learning needs of the school's students. The lead instructional coach shared, for instance, that "I stand before the faculty and I say to them that every single person in the school is a stakeholder to these children, because I wanted them to get out of that mindset, 'it's not my responsibility to move these children.' It's a literacy movement. If you are a social studies teacher, or a PE teacher, we all have buy-in. This year my focus has been, especially developing these PLCs, that every single department is a stakeholder to this literacy movement with the children." Through coordination of instructional activities and the infusion of effective practices across departments, the instructional coaching team at B104 appeared to be driving the efforts of the faculty and staff toward the goal of meeting the needs of the school's students, and fostering their academic and social learning where it is most challenged.

> *Illustration B:* Guiding the *systematic use of data* to **foster alignment, coherence, and integration across activities** toward personalization for academic and social learning.

B104's new instructional coaching team and its lead instructional coach also used available performance data to inform instructional decision-making at all levels of the school. The lead instructional coach reported, for instance, that the instructional coaching team used data to target specific students for academic intervention. She offered an example, explaining that "what I did this year…with our lowest quartile, buying in across the board, I assigned every elective teacher ten to twelve students within our lowest quartile, they made personal phone calls home explaining the importance of getting the children to FCAT camp." The lead instructional coach further emphasized that that the general objective of the team's focus on data use was to generate a greater appreciation for the power of personalization by the school's faculty and staff. She asserted that "at the beginning of the year, I made every teacher pull their data. I even made them pull a separate list of their lowest quartile. Teaching them the importance of that personalization piece, that a lot of times we don't know what kind of baggage these kids are coming to school with. Sometimes they just need someone to talk to, to know who they are."

Case Example 9: Middle school articulation

The transition from middle school into high school has been explored throughout the educational research literature. The need for suitable transition programs, both within the middle school, and in conjunction with the high school, has been identified as a way in which to increase success in high school (Mac Iver & Epstein, 1991; Hertzog & Morgan, 1999).

A number of studies indicate that students transitioning from middle school into high school have a multitude of concerns, including intimidation from the older students, problems navigating around the campus, difficulty in coursework, and becoming involved in extra-curricular activities (Chapman & Sawyer, 2001; Smith, Akos, Lim, & Wiley, 2008). As a result, middle school students' transition into high school can be challenging for many students, both academically and socially. High school tends to encourage more independent work, critical thinking, an increase in the breadth and depth of assignments, and increased pressure for good grades, as well as the social challenges of being the youngest students in the school, having to get to know the faculty and staff, meeting new students, and having more extracurricular options. Ninth grade is a year in which students' grades drop and the number of students dropping out increases. Smith and colleagues' work found that appropriate interventions can improve ninth-grade performance.

Mizelle and Irvin (2000) identify three elements of transition programs that support middle school articulation: "activities that provide students and parents with information regarding the transition, activities that provide social supports, and activities that bring middle school and high school educators together" (p. 3). More specifically, Smith and colleagues (2008) find that successful middle school transition programs include discussing student expectations, providing parents information about the transition, and highlighting both the similarities and differences of the high school experience. They also report that feeder middle schools and high schools need to work together (along with students) to identify the aspects of each school's "academic, social, and organizational attributes" (p. 41), so that the students' perceptions are aligned with a realistic understanding of what can be expected in high school.

District implementation

Initiated during the 1999-2000 year, Broward County Public Schools high school redesign initiative, referred to as the Blueprint for Redesign, identifies efforts to "personalize" as its first principle:

> Freshman Transition Activities - Freshman transition activities help ease the difficulties students often encounter as they move from middle to high school. Some schools place all first-year students in their own academy or house setting, sometimes in a separate wing or even a separate building, with extra supports from adults. In other cases, freshman transition includes mentoring from older students, or special career exploration classes designed to set the context for high school as a pathway to college and careers (broward.k12.fl.us, n.d).

Broward County Public Schools has supported district-wide resources allocated in the support of students' transition into ninth grade and the high school environment. Ninth Grade Academies (NGA) were established to help students with the transition into high school. The NGAs were either housed in a separate area of the high school or throughout the school but with a team of teachers and staff dedicated to the ninth grade students only.

However, though there appears to be an overarching district policy in place for the middle school students' articulation into high school, the interpretation of the policy appears to be at the discretion of

each individual high school. One participant reported that the District does not allow students to fail in middle school and as a result, students are not prepared for 9th grade: "They get here in 9th grade and suddenly they are supposed to be responsible. That's not the way it works."

School implementation

While all of the high schools in our study had a middle school articulation program, the programs at the high-VA schools stood out for their coherence and integration between the feeder and high schools. At the two high-VA schools, participants reported that a variety of stakeholders participated in programs focused on the middle school transition into high school. Participants at B104 reported a multifaceted approach to middle school articulation. All levels of participants (i.e. principal, leadership team, teachers, guidance counselors) at both B104 and the feeder middle schools participated in the effort. The B104 principal played an integral role in building these relationships.

At B103, participants reported collaborating with the middle school in regard to vertical alignment of the curriculum, specifically in math and English, going back to 6th grade. As one teacher reported "We work every year with the middle school English teachers to get these best practices from the AP vertical teaming in place from 6th through 12th." The administration reported that teachers participated in activities specifically directed to middle school articulation, meeting during planning periods and at other opportunities. As part of the personalization component, the principal reportedly gathered faculty and staff from the high school and brought them to the middle school for "a transition meeting. He lined up all of the guidance counselors, our custodial staff, our cafeteria staff, our security guards, our police officer, put them in front of the stage and said: all of these people, you can talk to any one of them."

Supporting Personalization for Academic and Social Learning

To support students, middle school articulation programs leveraged several of the essential components identified by the NCSU's framework in the service of personalization for academic and social learning. These components included establishing *personalized learning connections*, promoting *connections to external communities* and a *culture of learning and professional behavior* that manifests within the faculty and staff at the high school. Further, successful middle school articulation programs are **allocating adequate resources** such as time and faculty to enhance students' academic and social experiences in schools. **Promoting open communications across all stakeholders** facilitated the articulation efforts. In **fostering alignment, coherence and integration,** students' transition experiences were improved.

> *Illustration A:* Middle school articulation programs establish *personalized learning connections* with the students and their parents, essentially promoting academic and social learning. School administration **allocates adequate resources** to promote the success of the program. In turn, a collaborative among staff along with **alignment, coherence, and integration** of transition activities make for better student adjustment to high school

B104 and its feeder middle schools had policies in place that establish personalized learning connections with eighth grade students and create social and academic structures that support these students' transition into high school. Both students and their parents had opportunities to discuss, learn, and become familiar with the transition from middle school to high school. There were programs in place specifically for the students at the feeder middle schools. Incoming 8th graders had an opportunity to shadow a high school student for a day. At the end of the school year, the high school hosted an orientation for 8th grade students and their parents. During the summer B104 hosted an orientation at the high school for the incoming ninth graders. The incoming freshmen were given a tour of the high school that included a

meeting with the high school student government. Participants also reported that the middle school administration conducted 9th grade focus groups to discuss how prepared the students felt they were for 9th grade.

At the middle school, students were informed about what to expect in high school and provided opportunities for the eighth graders to learn about the expectations in high school, such as the increase in independent work, focus on GPA, and opportunities to be involved in extracurricular activities. The high school principal made frequent visits to the middle school to meet with students, especially those with discipline issues. Guidance counselors reported going to speak to middle school students during the year. The 504 liaison reportedly met with parents and students to inform them of changes in accommodations in high school, because such changes may be different than expected. Exceptional Student Education (ESE) was said to review the needs of the incoming middle school students to inform high school programs of the students' needs. The ESE personnel typically met with all parents of ESE students, with the general educations teachers and ESE case managers.

Once at B104, participants reported supporting the students' transition. The ninth grade counselor reported being dedicated to helping ninth grade students transition. One teacher reported giving students some leniency when it came to the new expectations, as far as homework and homework grades. As a result of these established structures as well as personal connections established with the students and their parents, administrators and teachers were confident that students were more prepared for the demands of high school and had a better sense of what was expected of them.

> *Illustration B***: Promoting open communication across stakeholders** leads to a r*igorous and aligned curriculum* and sustains a *culture of learning and professional behavior and personalized learning connection* to accomplish the goal of academic and social learning.

Communication between the feeder middle schools and the high-VA schools was a good demonstration of how comprehensive the middle school articulation efforts were for incoming freshman. The principal reported that B104 has "a great working relationship with [the feeder] middle school," referring to their biggest feeder school. At B104, this level of communication was credited to the initiative of the principal. The principal had begun a monthly meeting of feeder schools in that high school zone. This monthly meeting addressed a number of issues, including discussions around the middle school encroachment zone. These discussions then prompted the middle school and the B104 teachers to discuss concerns regarding the middle school students' articulation into high school.

Participants reported that many positive changes came out of these meetings. The principal worked with the middle schools to implement changes in policies and practices that more closely aligned with those at the high school. Team leaders participated in quarterly meetings to discuss these issues as well. B104 math teachers hosted meetings with middle school math teachers to discuss curricular alignment and student preparation. The language arts and social studies teachers also reached out to the middle school teachers. In addition to these meetings, the schools met annually to discuss this topic. As a result of these meetings, the English department identified areas of overlap to better align the middle school curricula to what was being taught in high school. B104 teachers also provided suggestions to the middle school teachers so that they gained awareness of practices that would prepare students for high school.

Participants at B103 reported that their teachers met with the middle school teachers to coordinate and discuss class progression. According to the principal, if it was necessary for the teachers to meet during the school day, resources were allocated for substitute teachers. This idea of promoting open communications across stakeholders at each school was integral to the success of the articulation efforts. B103 participants reported that they worked to have the transition from middle school to high school as smooth as possible for the students. The idea of a "seamless transition" was something the B103

principal reported as being important, not just from middle to high school, but the student transitions from one grade into the next during high school. This proactive approach was reiterated by the teachers as well who reported that middle school articulation "eliminates the disconnect between the middle school and high school, whereas what we are able to do is prepare those middle school teachers to what those students need to expect; therefore, there is a smooth transition." Participants recognized the importance in multiple disciplines. An assistant principal reported, "There is a saying, we got to bridge the gap. The gap is big when it comes to the math, middle school and high school." An English teacher reported that they "work every year with the middle school English teachers to get these best practices from the AP (assistant principal) vertical teaming in place from 6th through 12th."

Case Example 10: Small Learning Communities

Small learning communities (SLCs) have been at the core of school reform efforts to personalize schools for the last decade (Felner, Seitsinger, Brand, Burns & Bolton, 2007; Oxley, 2001; Supovitz, & Christman, 2005). Whether labeled as "schools-within-schools," "small schools," "houses and/or teams," the basic premise is to develop collaborative communities within schools as a central strategy for improving student learning (Supovitz & Christman, 2005). Scholars such as Felner and colleagues (2007) posit that the central focus across these efforts (i.e., creation of small learning communities) is to "create 'conditions' that engage students, support leaning, and enhance development" (p. 210).

A growing body of evidence supports the idea that small learning communities can improve achievement, performance and adjustment of students in middle and high schools (Felner, et al, 2007, Fine & Somerville, 1998, Oxley, 2001). Evidence suggests that the impact of personalized environments created in small learning communities, when fully implemented, consistently show even larger effects on socio-emotional/academic outcomes for students from socially and economically disadvantaged backgrounds (e.g., minority or poverty backgrounds) (Felner et al., 2007).

Along with identifying essential features of small learning communities (e.g., team structures) (Felner et al., 2007), researchers have identified aspects of practices and processes of successful communities (e.g., team practices, professional development, teacher buy-in and decision-making) (Felner et al., 2007; Oxley, 2001). Embedded in these elements are dimensions such as enrollments, class size, student teacher ratios on teams and grades, number of students a teacher is responsible for across a day, common planning time for teachers, strategic planning for staff, span of classes covered by the team, and the length of the class periods (Felner et al., 1993; Felner et al., 2001). Research focusing on more specific dimensions for fidelity and implementation of SLCs supports the view that aspects such as capacity and skill of teachers involved in the SLCs are critical. For example, Felner and colleagues assert that "small learning communities that are effective have teachers who are well prepared to engage student/parents, to provide standards-based instruction, to use common planning time/work in teams…" (p. 214).

In examining the effective creation of small learning communities in middle and secondary schools, scholars have also examined and noted several key lessons for the successful implementation of these programs (Felner et al., 2007, Oxley, 2001). From a broader perspective, Felner and colleagues (2007, p. 211) highlight "the importance of a comprehensive, theory-based multi-dimensional approach to strategies for creating and developing small learning communities; critical features and practices that define effective small learning communities as they relate to student motivation, learning, and performance; and what it takes to get implementation of these features and practices, at desired levels of fidelity and implementation."

District implementation

With the support from funding from the United States Department of Education (USDOE), Broward County implemented small learning communities in a number of schools throughout the district, including several of our case study schools. USDOE's Smaller Learning Communities (SLC) program awarded discretionary grants to local educational agencies (LEAs) to support the implementation of SLCs and activities to improve student academic achievement in large public high schools with enrollments of 1,000 or more students. SLCs include structures such as freshman academies, multi-grade academies organized around career interests or other themes, "houses" in which small groups of students remain together throughout high school, and autonomous schools-within-a-school, as well as personalization strategies, such as student advisories, family advocate systems, and mentoring programs (US Department of Education, 2006). Schools operating small learning communities in the district, as a result, could apply for grant funds through the district to support the development and activities of SLCs. As the fifth largest district in the U.S., Broward was been awarded consecutive grants to fund development and activities of SLCs. The district evaluated the activities and outcomes of these programs within the first four years, conducting a summative evaluation in the fifth year.

During the 2010-2011 school year, small learning communities were present in one of our high-VA case study schools, B103. According to participants at B103, apart from initial awards from USDOE discretionary grant funds in past years for the development of small learning communities, the district does not provide financial resources to support the activities of SLCs and its activities.

School implementation

One of our case study schools, B103, continues to offer small learning communities. In B103, all 9th and 10th graders are assigned to teams. Below the principal describes the purpose and the composition of the SLCs at B103. He indicated:

> "The specific purpose is personalization… seven adults own 100 common children. There are four core teachers—math, English, social studies, and science, your guidance counselor, your administrator. So you have a counselor over 9th grade; you have an administrator over 9th grade; and I say the seventh person is a secretary. The secretary is important. They are the front lines. So we value them. Also, we will bring in the ESE specialist. We might have a student who needs a collaborative problem-solving initiative, but those seven folk and the ESE specialist are pretty much the core of what is provided as resources for that child."

In B103, one of the teachers of the SLC is a "team leader" who coordinated team planning, meetings, and activities. Teachers had a common planning that met every other day in which they discussed individual student performance, classroom curriculum, and instructional practices/strategies.

Supporting Personalization for Academic and Social Learning

One of our higher-VA schools (B103) reported using small learning communities to promote *personalized learning connections* to bolster personalization for academic and social learning. The successful integration of small learning communities was facilitated by several enabling supports. For example, the small learning communities facilitated **open communication across all stakeholders** to increase academic achievement and promote personalization. The small learning communities also served as vehicles for making *connections to the external community*, specifically parents. Finally, the school **created supports for the work** of the faculty by providing administrative support and necessary structures for the SLCs.

Illustrations of how the two higher-VA schools maximized the effect of *small learning communities* in personalizing academic and social learning are provided below.

> ***Illustration A:*** School structures such as small learning communities enabled schools to facilitate **open communication across all stakeholders** to promote personalization for academic and social learning.

Participants at B103 reported that the small learning communities had been critical in improving student academic performance and increasing communication between students, parents, teachers, guidance, and administration. Reports from participants suggested that one of the key goals of the SLCs was to improve the academic performance of students. For example, the principal reported, "When we originally started out with our SLCs, we focused on 9th and 10th grade, because that's where we were losing most of our kids. That's where our kids were doing the poorest." The principal also reported that the goal for the SLC meetings this year "were normally to take anywhere from eight to ten kids per thirty minutes, to discuss those kids. Sometimes they wouldn't get to five of them, but the goal was to get ten kids, to discuss ten kids. Make contact with at least three or four percent, thirty minutes." The principal noted, "They [the SLC team] might spend all 30 minutes on one child. The big key is them meeting together and exchanging ideas that can help one another and contacting parents…"

Teachers shared that the SLCs were, indeed, invaluable in providing a structure for faculty to collaborate to develop personalized strategies to meet individual student needs. For example, one teacher in a focus group indicated, "He [the student] will come and meet with the SLC teachers for us to say, 'The reason why you are here, obviously you are a wonderful person, but you are not doing well academically. We want to know your part of it. What's going on with you?' We have had conversations like that." Several teachers reported that using this personalized approach had "most of the time yielded wonderful results." The value of using a team approach to address student needs was highlighted by several participants. For example, one teacher noted, "Occasionally you notice 'well, that student is in over his head, and maybe we need to reach beyond the student.' That's when you request a parent conference, and you get a team together to really figure it out, because if it's a bigger problem than your classroom, a bigger problem than what the student will acknowledge, and what the parent can take care of, you need a team approach."

In terms of fostering *connections to external communities*, communicating with parents and engaging them in strategic decision-making through parent conferences were key components and a goal of the SLCs. The principal indicated that "it's important for a parent to hear from three or four teachers at a time on a speakerphone. They feel like the kid is getting special attention." Participants confirmed that parent phone conferences in SLCs are an opportunity to connect with parents and to provide them both positive and negative feedback about their child's performance.

Participants also reported that the small learning communities were invaluable in providing a structure for professional collaboration to discuss instructional strategies to improve academic and social learning. For example, several teachers in the focus groups reported that in the SLCs teachers "meet to bring ways of making instructional activities more effective." From another perspective, the principal explained that, "what might work for one teacher and not for another teacher who may have a certain problem with Johnny, where another teacher uses a technique that keeps Johnny in line…, by collaborating… you are creating a sense of personalization, and they help each other out. They work as a team."

> ***Illustration B:*** Effective *schools* **allocate adequate resources** and **create supports for the work** of building the capacity of school actors to create *personalized learning connections* in the promotion of personalization for academic and social learning.

Participants in B103 identified the administration's effort to build school actors' capacity to promote academic and social learning as illustrated by the various resources that supported the SLCs and for the leadership of the SLCs.   At B103, resources were allocated to support the small learning communities. The principal shared that resources (i.e., time, space) had been allocated to support the SLCs. He shared that the SLC team had "common planning, which is key." The principal further reported that "they have a specific area in the school where they meet. We have the SLC room in the back of the portable, where there are phones and conference rooms set up… They have a database, and they are on a computer where they log in and document parent contact. They can access Pinnacle for grades, attendance, etcetera."

In addition to providing common planning time and physical resources, the administration in B103 developed structures to provide for leadership for the SLCs. Teachers (i.e., team leaders) were empowered to ensure that the goals of the SLCs are met. The principal indicated, "We designate team leaders. We hand pick them. They usually are people who have shown leadership ability within the school, whether it be school improvement committees, or whatever. We find that they want to be aspiring leaders, administrators, etcetera; and we hand pick them, and we pay them a small supplement. They coordinate the meetings. They run the meetings. They are actually like the traditional department chair; the only difference now is they are heading up a team of interdisciplinary teachers versus a department chair. We call them 'curriculum leaders' — folk who oversee an entire subject area. I want to say they meet -- all team leaders meet once per month, the whole group of team leaders meet once per month, on Fridays, religiously. And they are led by the 9th and 10th grade administrators, who run those meetings. A lot of professional development occurs during those meetings as well." Participants (i.e., teachers and one assistant principal) confirmed that at B103, the leadership of the SLCs was entrusted to team leaders and the 9th and 10th grade administrators.